

# **Conflict Resolution in Adolescent Relationships**

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# **Conflict Resolution in Adolescent Relationships**

Conflictoplossing in de Adolescentie

(met een samenvatting in het Nederlands)

Proefschrift

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## **General introduction**



Conflict is an inevitable feature of social relationships. When people interact, disagreements may arise. Especially in close relationships, people sometimes disagree. Although conflict might jeopardize relationships, conflict is not necessarily detrimental. The way conflicts are handled is important in determining whether conflicts are functional or dysfunctional. Moreover, the way conflicts are handled might reveal information about the nature of relationships and their developmental status. In the current dissertation, the key focus will be on conflict resolution. Conflict resolution is defined as the behaviors of people during a conflict. A conflict can range from a difference of opinion to an argument and does not necessarily include negative affect (Laursen, 1995; Shantz, 1987). In the current dissertation, the role of conflict resolution in adolescents' relationships with their parents and friends will be investigated in four empirical studies. The main focus will be on parent-adolescent conflict, but in Chapter 5 conflict with friends will also be examined.

In the present introduction, the main themes of the dissertation will be described (§ 1.1). Next, the specific research questions that will be addressed in this dissertation will be presented (§ 1.2). Then, the data and design of the data collection will be briefly described (§ 1.3). We will finish this chapter with an outline on the further contents of the dissertation (§ 1.4).

## **1.1 The Main Themes of the Dissertation**

### ***1.1.1 The Developmental Role of Conflict in Parent-Adolescent Relationships***

Before examining conflict resolution in adolescents' relationships, it is important to address the developmental role of conflict in parent-adolescent relationships as conflict is thought to serve an important role in the redefinition of these relationships. Many theories describe parent-adolescent conflict as necessary for adolescent development. According to psychoanalytic models, parent-adolescent conflict should be seen as a normative expression of the detachment process of adolescents from parents, triggered by biological changes. This view regards conflict and detachment from parents as normative and extreme parent-adolescent harmony as dysfunctional (for a review, see Steinberg, 1990). Neoanalytic theories emphasize individuation rather than detachment. For instance, separation-individuation theory (Blos, 1967) states that parent-adolescent conflict facilitates adolescent individuation and helps adolescents to develop autonomy and become independent of parents.

More recent theoretical perspectives, which do not longer consider adolescence as a period of storm and stress, hold a more positive view on conflict. In this view, conflicts are

regarded as temporarily perturbations that will lead to transformations and realignments in parent-adolescent relationships (Collins, 1990; Laursen & Collins, 1994; Youniss & Smollar, 1985). For example, the autonomy-relatedness perspective states that adolescents develop more autonomy, while remaining connected to their parents (Silverberg, Tennenbaum, & Jacob, 1992). Conflicts are thought to contribute to the development of autonomy and independence and teach adolescents to consider alternative or opposing points of view (Cooper, 1988; Grotevant & Cooper, 1986). Indeed, research indicated that adolescents' identity development and interpersonal skills are more advanced in families wherein family members express their own point of view and allow disagreements to arise (for a review, see Steinberg, 1990). So it seems that conflict has a function, namely setting a stage for a redefinition of roles in parent-adolescent relationships.

Even though many theories stress the functional role of conflict, parent-adolescent conflict has been repeatedly found to be related to disturbed family relations and problem behaviors in adolescence (Barber & Delfabbro, 2000; Collins & Laursen, 1992; Shagle & Barber, 1993; Shek, 1997, 1998; for a review, see Smetana, 1996). Whether conflicts are functional or dysfunctional for adolescent development is thought to depend to a certain extent on how these conflicts are handled. Whereas relationships marked by constructive conflict resolution may be related to adolescent adjustment and healthy family relationships (Collins & Laursen, 1992), those marked by destructive conflict resolution are more strongly associated with adolescent problem behavior and poor family functioning (Branje, Van Doorn, Van der Valk, Meeus, 2008). Nevertheless, research tends to focus more on conflicts than on conflict resolution during adolescence. In the current dissertation, we will examine the development of conflict resolution styles, and the effects of parents' and adolescents' conflict resolution styles on adolescent adjustment and relationship satisfaction.

### ***1.1.2 Operationalization of Conflict Resolution Styles***

Three commonly used strategies in parent-adolescent relationships and friendships include power assertion, negotiation, and disengagement (Laursen, 1993a). Although often labeled somewhat differently, most studies on conflict resolution involve these three conflict resolution styles. In the current dissertation, these conflict resolution styles were measured by Kurdek's Conflict Resolution Style Inventory (CRSI; Kurdek, 1994). In line with Kurdek (1994), the terms we use for power assertion, negotiation, and disengagement are conflict engagement, positive problem solving, and withdrawal, respectively. Conflict engagement involves being verbally abusive, angry, defensive or attacking, or losing self-control. Positive

problem solving involves trying to understand the others' position and using constructive reasoning tactics to work out compromises. Withdrawal involves avoiding the problem, avoiding to talk, and becoming distant.

In the current dissertation, we will investigate reports of conflict resolution in actual conflicts versus reports of conflict resolution in hypothetical conflicts, as the latter tend to find higher rates of positive conflict resolution styles that were not confirmed by findings on actual behavior (for a review, see Laursen & Collins, 1994). Also, parents and adolescents are instructed to rate the extent to which they use *each* of these styles during conflicts with each other, as research indicated that the use of several conflict resolution behaviors by the same person is quite common (Rubenstein & Feldman, 1993). We will examine the development of each conflict resolution style separately as well as the development of *patterns* of conflict resolution styles. Moreover, we will investigate specific *combinations* of conflict resolution styles by parents and adolescents.

### ***1.1.3 Conflict Resolution of Both Individuals in a Dyad***

When examining relational behavior, behavior of both members of a dyad should be included. The importance of investigating the behavior of both individuals in a dyadic relationship is stressed by many researchers (Hinde, 1997; Kashy & Kenny, 1990; Kenny & Cook, 1999; Lollis & Kuczynski, 1997; Stafford & Bayer, 1993). For example, The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 1990; Kenny & Cook, 1999) emphasizes that the behaviors of both individuals in a dyadic relationship contribute to individual or relationship adjustment: These behaviors are thought to be interdependent, that is, the way one dyad member behaves with the other dyad member depends, to some extent, on the behavior of the other dyad member.

When investigating conflict resolution behavior in parent-adolescent relationships, it is thus important to have information about conflict behavior of parents *and* adolescents, preferably based on independent reports. Moreover, one should look at interactions of parents' and adolescents' behavior on adolescent or relationship functioning. For example, if an adolescent generally complies with mother's request, it might make a difference whether mother generally yells and screams or whether she generally uses reasonable arguments.

There are two different patterns of conflict behaviors or interactions that have been studied before in parent-adolescent relationships and that have shown the relevance of investigating specific combinations of conflict resolution styles. These two patterns are the so-called demand-withdraw pattern and an interaction pattern characterized by reciprocal

hostility (Caughlin & Malis, 2004a, 2004b; Dadds, Sanders, Morrison, & Rebgetz, 1992; Patterson, 1982, 1995). The demand-withdraw pattern is an interaction pattern in which one person nags and criticizes, while the other person attempts to avoid the issue. Both combinations of demand-withdraw in parent-adolescent relationships, that is, demand by adolescents and withdrawal by parents, and demand by parents and withdrawal by adolescents, have been found to be related to negative adolescent adjustment and negative relationship adjustment (Caughlin & Malis, 2004a, 2004b). The other pattern of interaction, marked by reciprocal hostility, involves angry, hostile interactions between parents and children. This pattern has been found to be especially apparent in families with delinquent children (Dadds, Sanders, Morrison, & Rebgetz, 1992; Patterson, 1982, 1995).

Thus, both theory and empirical studies show the importance of investigating conflict behavior of both parents and adolescents. More importantly, they suggest that specific *combinations* of conflict resolution behavior should be examined. In the current thesis, we will examine how the way adolescents and parents resolve conflicts with each other is related to adolescent delinquency. We will use independent reports of parents' and adolescents' conflict resolution behavior. More importantly, we will investigate how specific *combinations* of conflict resolution styles by adolescents and parents are related to adolescent delinquency, namely the two demand-withdraw patterns and the reciprocal or mutual hostility interaction pattern.

### ***1.1.4 The Development of Parent-Adolescent Conflict Resolution***

Adolescents' relationships with parents undergo important changes that might affect the development of conflict resolution in this relationship. Ideally, parent-adolescent relationships gradually change from a vertical, asymmetrical relationship to a more horizontal and symmetrical relationship (Russell, Pettit, & Mize, 1998). Whereas adolescents are increasingly trying to gain autonomy and regard more issues to their personal jurisdiction, parents have different opinions regarding the appropriate timing of their adolescent's strive for more self-determination and this will inevitably result in conflict (Deković, Noom & Meeus, 1997). Indeed, early adolescence has been found to be a period in which parent-adolescent conflict is more frequent than in other periods (Laursen, Coy, & Collins, 1998). At the same time, the amount of time spent with parents declines. Despite the increase in parent-adolescent conflict and the decrease in time spent at home, most parent-adolescent relationships remain close (Holmbeck, 1996; Smetana, Campione-Barr, & Metzger, 2006).

Along with this development of parent-adolescent relationships, adolescents and parents might change the way they resolve conflicts with each other that will reflect developmental growth toward greater equality. For instance, several theorists argue that a more mature way of conflict resolution, characterized by more compromising and perspective taking, will develop in adolescents (e.g., Sandy & Cochran, 2000; Selman, 1980; Youniss & Smollar, 1985). Due to developmental changes in perspective taking, adolescents will be increasingly able to simultaneously consider both their own and the other's perspective and may be able to use more mature styles of conflict resolution (Sandy & Cochran, 2000). Likewise, unconstructive conflict resolution might decline when adolescents get older. In the current dissertation, we will investigate the development of both positive and negative conflict resolution styles in parent-adolescent relationships.

### ***1.1.5 Conflict Resolution between Family Subsystems***

When investigating development of adolescent conflict resolution with parents, it is also important to place this relationship in a broader relational context (Bronfenbrenner, 1986). Special attention should be given to the marital or interparental relationship, as research has shown the profound role marital relationships play in children's and adolescents' behavior (Cox, Paley, & Harter, 2001; Engfer, 1988; Erel & Burman, 1995). Many of the results from studies examining the relations between different family subsystems might be explained by family systems theory (Minuchin, 1985). Family systems theory regards the family as a social system, consisting of several subsystems (e.g., the marital subsystem, the parent-child subsystem). Each subsystem influences and is influenced by other subsystems (Minuchin, 1985). According to family systems theory, families are hierarchically arranged, suggesting that parents' behaviors influence adolescents' behaviors more strongly than the reverse (e.g., Erel & Burman, 1995). However, family systems theory also stresses mutual influences between family relations and thus acknowledges the possibility of bidirectional influences as well.

Findings regarding the effect of marital conflict on parent-child relationships indicate that it is not *whether* but *how* parents fight that matters (Cummings, Goeke-Morey, & Graham, 2002; Cummings, Goeke-Morey, & Papp, 2001). As family subsystems are related to each other, the way conflicts are handled within these subsystems might also be related to each other. Moreover, as families are hierarchically arranged, the way parents handle conflict with each other might influence the way adolescents handle conflicts with their parents. Several studies have found a relation between conflict resolution styles utilized in marital

relationships and the same conflict resolution styles in parent-adolescent relationships (Noller, Feeney, Sheehan, & Peterson, 2000; Noller, Feeney, Peterson, & Sheehan, 1995; Reese-Weber, 2000; Reese-Weber & Bartle-Haring, 1998; Rinaldi & Howe, 2003). However, these studies were all cross-sectional and thus were not able to investigate direction of effects. In the current thesis, we will investigate how conflict resolution in the marital relationship is related to conflict resolution in the adolescent-parent relationship two years later.

### ***1.1.6 Differences in Conflict Resolution with Parents and Friends***

Even though relationships with parents remain salient during adolescence, friends are becoming more and more important. Not only are adolescents spending more time with friends when they become older (Csikszentmihalyi & Larson, 1984), friends are also becoming a greater source of support to them (Furman & Buhrmester, 1992; Helsen, Vollebergh, & Meeus, 2000). Close peers offer important opportunities for the acquisition of many essential social skills, such as the ability to resolve conflicts (Laursen, 1993a). It is especially the horizontal nature of friendships that provides the adolescent with experiences in negotiation and cooperation (Hartup, 1992).

According to the social relational model (Laursen & Collins, 1994), relationships can be distinguished by their *closeness* and *openness*. Relationships with parents and friends are both characterized by the highest level of closeness. Adolescent relationships with parents and friends differ with regard to the openness of the relationship or the ease with which the relationship can be dissolved (Laursen, 1996). Parent-adolescent relationships are *closed* and *involuntary* relationships as they are constrained by kinship, norms, and law and they are not easily dissolved. In contrast, relationships with friends are *open* relationships: They are voluntary and they are formed and dissolved more regularly (Laursen & Collins, 1994).

The level of closeness and openness in relationships with parents and friends has implications for the way adolescents handle conflicts with parents and friends. With friends, adolescents will try to avoid conflict and when conflicts do occur, they tend to avoid expressions of anger and tend to compromise more in order to maintain the friendship (Collins & Steinberg, 2006). In contrast, during conflict with parents, adolescents will be less precautious for these relationships are more likely to endure (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997). Indeed, meta-analyses on conflict management with close peers showed that adolescents used more negotiation than disengagement and power assertion with close peers. During conflict with parents, power assertion appeared as the dominant strategy,

and negotiation was used least often (Laursen, 1993a; Laursen, Finkelstein, & Townsend-Betts, 2001).

The level of closeness and openness in relationships with parents and friends might also have consequences on the impact of daily conflict on adolescents' relationships with their parents and friends. Adolescents report a different impact of conflict with parents and friends on relationship quality. Whereas adolescents expect that conflict with close friends will improve more often than worsen relationships, the opposite was true for conflict with parents (Laursen, 1993b). In the current thesis, we will investigate how daily conflict and daily relationship satisfaction are related to each other in adolescents' relationships with parents and friends.

### ***1.1.7 Daily Dynamics of Conflict Resolution***

As has been mentioned before, relationships consist of social interactions. Many studies have focused on relations between qualities of adolescent relationships on the one hand and relationship quality or adolescent adjustment on the other hand. Although the dynamic nature of relationships is widely recognized, most studies assess relationship quality as a relatively static concept and only examine changes over an extended period of time, thereby ignoring daily fluctuations in relationship quality. Diaries offer the opportunity to investigate social processes within everyday situations (Bolger, Davis & Rafaeli, 2003) and help us to get a better understanding of processes underlying day-to-day fluctuations. Moreover, whereas other research mainly focused on variability between persons or focused on differences between relationships, the use of diaries enables us to investigate variability within persons as well. Thus, this type of design allows us to investigate whether relations that are found at the between-person level can also be found at the within-person level. For instance, with traditional methods one can investigate whether fathers who are more involved (i.e. spend more time with their children) are also more supportive. With daily measures it is possible to investigate whether a father is more likely to be supportive on days he spends more time with his children than on days he spends less time with them (see Almeida, Wethington, & McDonald, 2001). This gives us a better insight in the processes of daily life – or life as it is lived.

With the diary study we are able to grasp daily conflict processes. As has been mentioned before, parent-adolescent conflict has been found to be related to disturbed family relationships and problem behaviors in adolescence (for a review, see Smetana, 1996). In addition, the way adolescents handle conflicts has been found to be related to adolescent

adjustment and relationship adjustment (Dishion, Andrews, & Crosby, 1995; Jackson, Bijstra, Oostra, & Bosma, 1998; Jaffee & D’Zurilla, 2003; Rubenstein & Feldman, 1993; Sanders, Dadds, Johnston, & Cash, 1992). In the current dissertation, we will investigate whether these relations are also present at the daily level.

## 1.2 Research Questions

*How are conflict resolution styles in parent-adolescent relationships related to adolescent delinquency?*

In the first study we will investigate cross-sectional associations between conflict resolution styles of parents and adolescents and adolescent delinquency. First, we will investigate how the conflict resolution styles *adolescents* use in conflicts with their parents are related to adolescent delinquency. Subsequently, we will examine how the conflict resolution styles *parents* use in conflicts with adolescents are related to adolescent delinquency. Finally, we will investigate which *combinations* of conflict resolution styles of adolescents and parents are related to adolescent delinquency, as we know that behaviors of both individuals in a dyadic relationship are interdependent (Hinde, 1997; Kashy & Kenny, 1990; Kenny & Cook, 1999). We will specifically examine the demand-withdraw pattern, in which one person uses an aggressive conflict resolution style while the other person withdraws. Also, inspired by coercion theory (Patterson, 1982), we will examine a mutually hostile interaction pattern in which both individuals use an aggressive conflict resolution style. We use independent reports: Adolescents report on the conflict resolution styles they use with their fathers and mothers. Also, fathers and mothers report on the conflict resolution styles they use with their adolescents.

*How does adolescent and parent conflict resolution develop? Can different groups of parent-adolescent relationships be distinguished longitudinally based on the conflict resolution styles they use?*

In the second study we will investigate longitudinal changes in conflict resolution styles of parents and adolescents. We will examine the development of each conflict resolution style separately for a period of four years. Thus, this study enables us to longitudinally investigate the development of conflict resolution in parent-adolescent relationships and to examine

whether the realignment of a vertical, asymmetrical relationship to a more horizontal, symmetrical relationship is accompanied by changes in conflict resolution as well.

Moreover, we will investigate whether different groups of parent-adolescent dyads can be identified longitudinally based on their constellation of conflict resolution styles. In this way, we are able to investigate whether there are differences in parent-adolescent dyads regarding their configuration of conflict resolution styles, as we expect that for some parent-adolescent dyads the transition to a more symmetrical relationship might be more stressful than for others.

Thus, a variable-centered approach (development of conflict resolution styles) and a person-centered approach (identifying different groups of parent-adolescent dyads) are combined in this study. In this study, adolescents report on the conflict resolution styles they use with their fathers and mothers. Also, their fathers and mothers report on the conflict resolution styles they use with them.

*Does transmission of conflict resolution styles from marital relationships to adolescent-parent relationships occur?*

In the third study we will examine whether the way parents resolve conflicts with each other influences the way adolescents resolve conflicts with their parents two years later. Thus, with the current study we are able to investigate whether subsystems within the family are related to each other and whether there is a hierarchical order in it, as family systems theory suggests (Minuchin, 1985). The design of the study also enables us to investigate bidirectional effects between family subsystems and thus whether the way adolescents resolve conflicts with their parents influences the way parents resolve conflicts with each other two years later or whether both family subsystems influence each other. We use independent reports, as marital conflict resolution styles are measured by both fathers' and mothers' perceptions of their conflict resolution behaviors with adolescents, and adolescent-parent conflict resolution styles are measured by adolescents' perceptions of their conflict resolution behavior with both fathers and mothers.

*How is conflict on one day related to perceived relationship satisfaction on the same day in a particular relationship? Is this relation different for the occurrence of no conflict, constructively handled conflict, and unconstructively handled conflict? How is conflict on one day related to perceived relationship satisfaction one day later in a particular*

*relationship? Is this relation different for the occurrence of no conflict, constructively handled conflict, and unconstructively handled conflict?*

Adolescents are asked to fill out a diary for seven consecutive days and report about conflicts and relationship satisfaction with their parents and best friends. With this study, we are able to investigate whether the consequences of conflict depend on the relationship context in which conflict occurred as supposed by the social relational model (Laursen & Collins, 1994).

First, we will investigate whether conflict and relationship satisfaction is related to each other at the daily level. That is, do adolescents who have conflicts with their parents and best friends on certain days, also rate their relationship satisfaction with them lower on these day than on days adolescents have no conflicts with their parents and best friends, respectively? Subsequently, we will investigate whether the way conflicts are resolved is related to perceived relationship satisfaction. In these analyses we distinguish between the occurrence of no conflict, constructively handled conflict, and unconstructively handled conflict. After this, we will examine whether there is a lagged effect of conflict on perceived relationship satisfaction, that is, we will examine whether conflict on one day is related to relationship satisfaction one day later, controlling for relationship satisfaction on the day before. We will also examine whether the occurrence of no conflict, constructively, and unconstructively handled conflict is related to perceived relationship satisfaction one day later.

### **1.3 Data and Design of the Data Collection**

#### ***1.3.1 Conamore***

In the current thesis, data of a 5-wave longitudinal project called CONAMORE are used (Conflict And Management Of Relationships 2001 – 2005; Meeus et al., 2004). This study consists of a main study and an additional study, called the family sample. In the main study of CONAMORE, 938 early adolescents (mean age 12.4 years,  $SD = 0.6$ , ranging from 10-15 years) and 393 middle adolescents (mean age 16.7 years,  $SD = 0.8$ , ranging from 16-20 years) from twelve high schools located in the province of Utrecht, The Netherlands, annually filled out a battery of questionnaires at school for five consecutive years. These questionnaires concerned aspects of parent-adolescent relationships, such as conflict behavior and relationship quality, and aspects of adolescent functioning (i.e., internalizing and externalizing problem behavior).

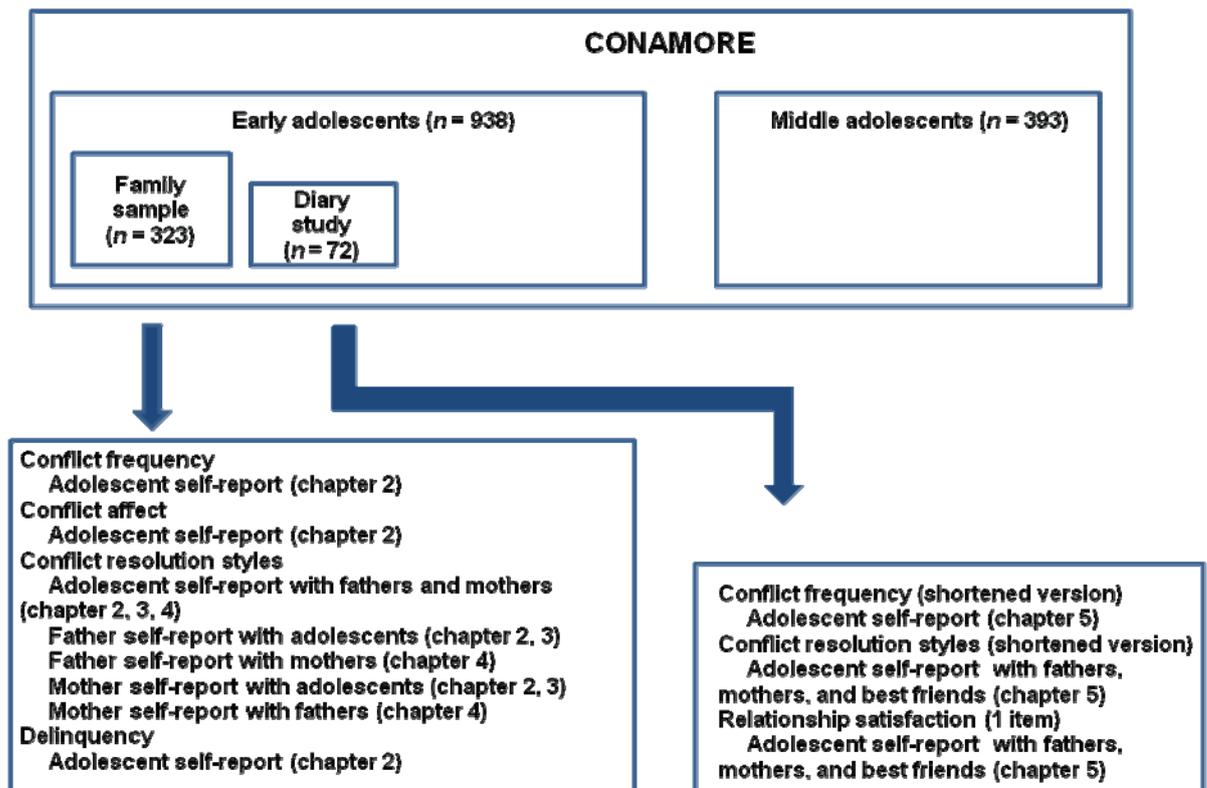
*Family sample.* The current dissertation focuses on data of the early adolescent cohort only. In Chapter 2, 3, and 4 of this dissertation, data from the family sample of CONAMORE are used. At the first measurement, the *Dutch early adolescents* received a letter including an invitation to participate with both parents during annual home-visits as well. Thus, we excluded ethnic minorities from participating. Of the families invited, 491 families initially agreed to participate. Due to our restriction of including only two-parent Dutch families, 90 one-parent families who agreed to participate were not able to take part in this additional research project. For financial reasons, 323 families were randomly selected from the 401 two-parent families to participate from Wave 2 onwards. The family sample consists of four measurement waves, each with a one-year interval in between. In the family sample, fathers and mothers also filled out questionnaires regarding the relationship with the participating adolescents and with each other – among other things.

At wave 2, which is the first measurement wave of the family sample, adolescents had a mean age of 13.3 ( $SD = 0.51$ ) and the sample consisted of 156 boys (48.3%). Different levels of education were represented in the family sample, with approximately 40 % of the adolescents at schools preparing for university, 35 % of the adolescents at schools preparing for higher professional education and 15 % of the adolescents at schools preparing for lower-level jobs.

*Diary study.* In Chapter 5, diary data from 72 adolescents are used (40 girls; 55.6%), whose ages ranged from 14 to 16 years old ( $M = 15.59$ ,  $SD = 0.46$ ). The adolescents that participated in the diary study are another subsample of the CONAMORE study, recruited specifically for this dissertation. The diary study was conducted approximately six months after the fourth annual wave of the main study. The adolescents participating in this additional study named Dutch as their main identity, lived with both parents and did not already participate in the family sample. Different levels of education were represented in the diary study, with 53.5% of the adolescents at schools preparing for university, 34% of the adolescents at schools preparing for higher professional education and 12.5% of the adolescents at schools preparing for lower-level jobs.

In the diary study, adolescents answered questions regarding the relationship with their mothers, fathers, and best friends each day for seven consecutive days. They also indicated how many conflicts they have had that day with their mothers, fathers, and best friends. Finally, for each specific conflict that occurred, they filled out to what extent they used the three conflict resolution styles conflict engagement, positive problem solving, and

withdrawal. Figure 1 represents a graphical presentation of the Conamore study and how both our samples (i.e., family sample and diary study) relate to the main study.



### 1.3.2 Measures

*Conflict frequency.* Conflict frequency with fathers and mothers was measured using an Interpersonal Conflict Questionnaire (Laursen, 1993b; 1995). Adolescents rated on a 5-point Likert scale how often, ranging from *never* to *often*, they have had an argument or fight with father and mother for 35 issues over the past seven days. The issues covered topics such as ‘manners’, ‘watching too much TV, or using the computer or phone too much’, ‘privacy’, ‘not doing what you are asked to do’, ‘appearances and clothing’, ‘homework’, and ‘being honest’. So, here the reference period is one week. In Chapter 5, where the diary study is described, adolescents were instructed to fill out questions regarding conflict at a daily basis. Thus, in the diary study the reference period of conflict is only one day (actually it is less than one day, as they rate the number of conflicts at the same day the conflict occurred). Also, we have shortened the original 34 item questionnaire into a 10-topic list.

*Conflict affect.* Conflict affect was also measured using Laursen’s Interpersonal Conflict Questionnaire (1993b, 1995). Adolescents had to rate on a 5-point Likert scale, ranging from *friendly* to *angry*, how they generally felt during conflicts with fathers and mothers, and also

how they felt after these conflicts. Additionally, they had to rate how these conflicts influenced the relationship with fathers and mothers on a 5-point Likert scale ranging from *making the relationship better* to *making the relationship worse*. The three items were averaged to compute mean scores for conflict affect with fathers and mothers.

*Conflict resolution styles.* Conflict resolution styles were measured using Kurdek's Conflict Resolution Style Inventory (CRSI; Kurdek, 1994). This questionnaire, originally designed for couples, was modified so that it referred to parents and adolescents. Adolescents rated the extent to which they used these three conflict resolution styles during conflicts with fathers and mothers. Also, fathers and mothers rated the extent to which they used the same three conflict resolution styles during conflicts with their adolescents. In Chapter 3, fathers and mothers also reported on the conflict resolution styles they use with each other. Each conflict resolution style was measured by 5 items and the items were rated on a 5-point Likert scale ranging from *never* to *always*.

Conflict engagement involved being verbally abusive, getting very angry, or losing self-control and is measured by items such as: 'getting furious and losing my temper', and 'letting myself go and saying things I do not really mean'. Positive problem solving involved making compromises and discussing the conflict effectively. Sample items of positive problem solving are: 'negotiating and trying to find a solution that is mutually acceptable' and 'sitting down and discussing the differences of opinion'. Withdrawal implied avoiding the problem, avoid talking, and becoming distant. Items used to measure withdrawal are for example: 'not listening anymore', 'refusing to talk any longer', and 'withdrawing from the situation'. The studies that will be described in Chapter 2, 3, and 4 use the original questionnaire of Kurdek (1994). In Chapter 5, in which the diary study is described, we use a shortened version of the questionnaire concerning conflict resolution. More specifically, the five items per style are combined and summarized into one item.

*Delinquency.* Delinquency was measured by a 16-item questionnaire, adapted from Baerveldt, Van Rossem & Vermande (2003), designed to measure minor offences. Adolescents were asked to indicate on a 4-point score ranging from *never* to *four times or more* how often they had shown certain forms of delinquent behaviors during the last 12 months. Sample items were 'stolen a bike', 'deliberately broken something at the street', and 'started a fire'.

*Relationship satisfaction.* Adolescents had to rate how satisfied they were with each relationship on a certain day by rating the statement: "I was satisfied today with the

relationship with my mother/ father/ best friend?”. They had to rate this question on a 5-point Likert scale ranging from *not true at all* to *entirely true*.

#### **1.4 Outline of the Dissertation**

After the current introduction, four chapters follow containing four empirical studies. The last chapter of this dissertation contains a summary of the four empirical studies as well as a general discussion of these studies. Finally, a reference list, a summary (in English and in Dutch), acknowledgements (in Dutch), a curriculum vitae (in English and in Dutch), and my publication list are presented as the closing sections of this dissertation.

**Conflict Resolution in Parent-Adolescent Relationships and Adolescent  
Delinquency<sup>1</sup>**

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<sup>1</sup>Van Doorn, M. D., Branje, S. J. T., Meeus, W. H. J. (in press). Conflict resolution in parent-adolescent relationships and adolescent delinquency. *The Journal of Early Adolescence*.

**Abstract**

This study examined the relation between conflict resolution styles in parent-adolescent relationships and adolescent delinquency. Questionnaires about conflict resolution styles were completed by 284 early adolescents (mean age 13.3) and their parents. Adolescents also completed a questionnaire on delinquency. Hierarchical regression analyses showed that combinations of adolescents' and parents' conflict resolution styles were significantly related to delinquency. In adolescent-father relationships, the demand-withdraw pattern was found to be related to delinquency, and in adolescent-mother relationships the interaction characterized by mutual hostility was found to be related to delinquency. The results stress the interdependence of adolescents and parents in conflict resolution and demonstrate the need for investigating combinations of adolescents' and parents' conflict resolution styles.

## 2.1 Introduction

Conflicts are very common in parent-adolescent relationships and are particularly frequent in early adolescence (Galambos & Almeida, 1992; Laursen, Coy, & Collins, 1998; Paikoff & Brooks-Gunn, 1991; Steinberg, 1990). Adolescents are striving for autonomy during this age period, but parents and adolescents have different expectations about the timing of adolescents' autonomy, which inevitably results in conflicts (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997). Whether conflicts are functional or dysfunctional depends to a certain extent on how these conflicts are handled. Whereas relationships marked by constructive conflict resolution may be related to adolescent adjustment (Collins & Laursen, 1992), those marked by destructive conflict resolution might be associated with adolescent problem behavior. In the current study, we will examine not only the conflict resolution styles of adolescents, but also the conflict resolution styles of their parents, and we will relate these styles to adolescent delinquency.

The potential importance of the relation between conflict resolution styles of adolescents and their parents and adolescent delinquency has been identified by the social problem solving model (Chang, D'Zurilla, & Sanna, 2004). According to this model, adolescents with greater problem solving ability will respond more appropriately and adaptively to conflict situations in which externalizing behavior might be a response alternative. Also, parents with greater problem solving ability will help them solve problems outside the home more effectively and will presumably deal more effectively with their children's externalizing behaviors (Jaffee & D'Zurilla, 2003). In addition, coercion theory poses that adolescents who learn from their parents to use coercive behavior in family interactions are more likely to be antisocial and to behave similarly in interactions with others outside the home (Conger, Ge, Elder, Lorenz, & Simons, 1994; Dishion, Patterson, Kavanagh, 1992; Patterson, 1982). The link between conflict resolution styles and adolescent delinquency is further recognized in family interventions for treating and preventing adolescent problem behavior, which frequently focus on problem solving training for adolescents and their parents (Robin & Foster, 1989). In line with this, research indicates that a combination of parental management and child problem solving training resulted in greater reduction in antisocial behavior than either intervention alone (Kazdin, Siegel, & Bass, 1992).

In the social problem solving model, three types of conflict resolution styles are distinguished: a constructive style, labeled rational problem solving, and two destructive styles: an impulsive-carelessness style, characterized by impulsiveness and recklessness, and

an avoidance style, marked by passivity and withdrawal. These three styles are widely recognized in the parent-adolescent literature (Laursen, 1993a, Laursen & Collins, 1994; Rubenstein & Feldman, 1993). Adolescents and parents with greater problem solving ability are characterized by relatively high scores on the constructive problem solving style or relatively low scores on the destructive styles (Chang et al., 2004). In the current study, we assess these three styles using Kurdek's Conflict Resolution Style Inventory (CRSI, Kurdek, 1994). The styles positive problem solving (which involves compromise and negotiation), conflict engagement (which involves being verbally abusive, angry, defensive or attacking, or losing self-control), and withdrawal (which involves avoiding the problem, avoiding to talk, and becoming distant) used in the current study correspond with the rational problem solving style, the impulsive-carelessness conflict resolution style, and the avoidance style, respectively, which were distinguished by the social problem solving model.

### ***2.1.1 Adolescent Conflict Resolution Styles***

Thus far, a limited number of studies has examined the association between adolescent conflict resolution and adolescent delinquency. Three different studies found support for a possible relation between the conflict resolution style conflict engagement and delinquency: Rubenstein and Feldman (1993) showed that adolescent boys who frequently respond to parent-adolescent conflicts with attack were at risk for delinquent behavior. This relation was found independently of the number of conflicts. Higher levels of an impulsive or carelessness problem solving style have also been found to be related to higher levels of delinquent behavior in adolescents (Jaffee & D'Zurilla, 2003). In addition, higher levels of aversive verbal content during conflict were related to conduct disorder in pre-adolescents (Sanders, Dadds, Johnston, & Cash, 1992). Mixed results have been found concerning an avoidant or withdrawing conflict resolution style. Whereas one study reported that higher levels of conflict avoidance of adolescents was related to higher levels of delinquency (Jaffee & D'Zurilla, 2003), another study failed to find this relation for adolescent boys (Rubenstein & Feldman, 1993). The latter study also failed to find a significant relation, after controlling for the number of conflicts, between higher levels of compromise, a constructive style, and lower levels of delinquency. In contrast, research on pre-adolescents with conduct disorders did find that these children showed lower levels of effective problem solving (Sanders et al., 1992). Thus, conflict engagement of adolescents, characterized by attack, display of anger, and impulsiveness, seems to be positively related to adolescent delinquency. No consistent results

have been found regarding the relation between the use of withdrawal and positive problem solving by adolescents on the one hand and delinquency on the other hand.

### **2.2.2 Parental Conflict Resolution Styles**

Besides the conflict resolution styles adolescents use in conflicts with their parents, the conflict resolution styles their parents use in these conflicts might also be important for adolescents' adjustment. In families with delinquent adolescents, mothers were found to use lower levels of constructive conflict resolution than in families with nondelinquent adolescents, whereas this was not the case for fathers' level of constructive conflict resolution (Borduin, Henggeler, Hanson, & Pruitt, 1985). Moreover, lower levels of constructive conflict resolution by mothers during early adolescence were found to predict severe delinquent behavior in early adulthood (Klein, Forehand, Armistead, & Long, 1997). However, this relation was not found for minor delinquent behavior. Parents' use of hostile behaviors towards early adolescents has been found to be associated with higher levels of conduct problems both concurrently (Conger, Conger, Elder, Lorenz, Simons, & Whitbeck, 1992; Conger, Conger, Elder, Lorenz, Simons, & Whitbeck, 1993) and longitudinally (Ge, Best, Conger, & Simons, 1996). Yet, Jaffee and D'Zurilla (2003) failed to find significant relations between the use of three different conflict resolution styles by both mothers and fathers (i.e., an impulsive or carelessness problem solving style, an avoidance style, and a constructive conflict resolution style) and adolescent delinquency. As these results are not consistent, and there are many indications that fathers and mothers play differential roles in their adolescents' lives (for a review, see Collins & Russell, 1991), we will investigate how conflict resolution styles of parents are related to adolescent delinquency in the adolescent-father and adolescent-mother relationship separately. Thus, we will not only examine the relation between conflict resolution styles of adolescents with fathers and mothers and adolescent delinquency, but we will also examine the relation between conflict resolution styles of fathers and mothers and adolescent delinquency. We especially expect that the use of the conflict resolution style conflict engagement by parents, which is marked by hostility and display of anger, might be related to higher levels of delinquency. We will explore whether withdrawal and positive problem solving of parents will be related to delinquency.

### **2.2.3 Combinations of Adolescents' and Parents' Conflict Resolution Styles**

Not only the conflict resolution styles that adolescents and parents independently use, but also the *combinations* of these styles might be related to delinquency as both parent and

child behavior are assumed to be important in eliciting and maintaining the child's antisocial behavior (Kazdin, 1987; Patterson, 1982). According to coercion theory, adolescent delinquency is highly influenced by experiences in the family in which parents and adolescents reciprocally influence each other (Patterson, 1982). This is in line with theories that emphasize bidirectionality in parent-adolescent relationships, which indicate that parents and adolescents mutually influence each other's behaviors (e.g., Hinde, 1997; Lollis & Kuczynski, 1997; Minuchin, 1985; Stafford & Bayer, 1993). The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 1990; Kenny & Cook, 1999) also emphasizes that the behaviors of both partners in a dyadic relationship contribute to individual or relationship adjustment. Moreover, it is stressed that these behaviors are interdependent, that is, the way one dyad member behaves in conflicts with the other dyad member depends, to some extent, on the behavior of the other dyad member. This interdependence and bidirectionality suggest that specific combinations of conflict resolution styles used by adolescents and parents will have consequences for the parent-adolescent relationship and adolescent psychosocial adjustment. For example, if an adolescent generally complies with mother's request, it will make a difference whether mother generally yells and screams or whether she generally uses reasonable arguments. Thus, it is crucial not only to include the conflict resolution styles of adolescents and their parents, but also to examine the combinations of these styles.

Delinquent children and adolescents are often found to be part of a family system marked by reciprocal hostility (Dadds, Sanders, Morrison, & Rebgetz, 1992; Patterson, 1982, 1995). In this interaction pattern, parents and children engage in angry, coercive interactions. There is an indication that this pattern would be more apparent in adolescents' interactions with mothers than with fathers. Whereas mothers from distressed families responded to their adolescents' negative behavior with significantly more negative and less positive problem solving behavior than mothers from nondistressed families, no significant differences were found in how fathers from distressed and nondistressed families responded to adolescents' negative behavior (Kransley & Bry, 1991). Also, adolescents from distressed families were found to respond to mothers' negative behavior with significantly less positive problem solving and more negative behavior than adolescents from nondistressed families. No significant differences were found among adolescents from distressed or nondistressed families when responding to their fathers' negative behavior (Kransley & Bry, 1991). In addition, a study on delinquent children and their mothers showed that delinquent children tend to reciprocate the levels of aversive verbal behavior and angry affect displayed by their

mothers (Sanders et al., 1992). We will investigate whether the combination of higher levels of conflict engagement by both adolescents and parents is related to delinquency. Based on the aforementioned studies, we specifically expect that the combination of conflict engagement of adolescents and conflict engagement of mothers is related to delinquency.

The combination of conflict resolution styles by two dyadic partners studied most frequently is the so-called demand-withdraw pattern (Christensen & Heavey, 1990; Kurdek, 1995). In research on marital relationships, this demand-withdraw pattern, characterized by the combination of wives' conflict engagement and husbands' withdrawal, predicted a decrease in marital satisfaction for both husbands and wives (Kurdek, 1995). Recently, this pattern has been investigated in parent-adolescent dyads. The two demand-withdraw combinations, that is, demand by adolescents and withdrawal by parents and withdrawal by adolescents and demand by parents were found to be related to problem behavior. Whereas the combination of parent demand and adolescent withdrawal was associated with high alcohol and drug use by adolescents, the combination of adolescent demand and parent withdrawal was mostly associated with low self-esteem of adolescents (Caughlin & Malis, 2004b). As several studies have shown that the demand-withdraw pattern is an ineffective way of resolving conflicts that has been related to negative adjustment (Caughlin & Malis, 2004a, 2004b; Kurdek, 1995), we will investigate whether this combination of styles in adolescent-parent relationships will also be related to delinquency. More specifically, we will investigate whether the interaction of higher levels of conflict engagement (or: demand) by adolescents and higher levels of withdrawal by parents is related to adolescent delinquency and whether the interaction of higher levels of conflict engagement (or: demand) by parents and higher levels of withdrawal by adolescents is related to adolescent delinquency. We expect that the combination of higher levels of conflict engagement by parents and higher levels of withdrawal by adolescent is related to delinquency, as it was found to be related to alcohol and drug use (Caughlin & Malis, 2004b).

To summarize, the following questions will be addressed in the current study for the adolescent-father and adolescent-mother relationship separately: 1. How are the conflict resolution styles *adolescents* use in conflicts with their parents related to adolescent delinquency? We hypothesize that higher levels of conflict engagement will be related to higher levels of delinquency. We will explore whether withdrawal and positive problem solving of adolescents will be related to delinquency. 2. How are the conflict resolution styles *parents* use in conflicts with adolescents related to adolescent delinquency? We hypothesize that higher levels of conflict engagement by parents will be related to higher levels of

adolescent delinquency. We will explore whether withdrawal and positive problem solving of parents will be related to delinquency. 3. What *combinations* of conflict resolution styles of adolescents and parents are related to adolescent delinquency? We hypothesize that the combination of higher levels of conflict engagement by parents and higher levels of withdrawal by adolescents will be related to adolescent delinquency. We will explore whether the combination of conflict engagement by adolescents and withdrawal by parents will be related to delinquency. Additionally, we hypothesize that the combination of higher levels of conflict engagement of adolescents and parents will be related to higher levels of delinquency. We specifically expect this pattern to be significantly related to delinquency in the adolescent-mother relationship.

As both the number of conflicts and conflict-affect are found to be associated with adolescent problem behavior (Barber & Delfabbro, 2000; Borduin et al., 1985; Sanders et al., 1992; Shek, 1997, Tesser, Forehand, Brody, & Long, 1989), we decided to control for these factors in our analyses. In our analyses we will also control for sex of adolescents, as it is known that boys generally have higher levels of delinquency than girls (Coie & Dodge, 1998; Farrington, 2004). Although we have no theoretical or empirical reasons to expect differences between boys and girls, we will examine moderation effects of sex of adolescents between the aforementioned relations.

## 2.2 Method

### 2.2.1 Participants

Of the 284 adolescents that participated in the current study, 142 were boys (50.0 %). The mean age of the adolescents was 13.3 years (ranging from 12-15 years,  $SD = 0.5$ ); the mean age of the fathers and mothers was respectively 46.8 years (ranging from 35-65,  $SD = 5.1$ ) and 44.3 years (ranging from 34-55 years,  $SD = 4.1$ ). Adolescents named Dutch as their main ethnic identity and lived with both parents. Different levels of education were represented, with approximately 51 % of the adolescents at schools preparing for university, 36 % of the adolescents at schools preparing for higher professional education and 14 % of the adolescents at schools preparing for lower-level jobs. Of the fathers, 1.8 % did not finish high school, 21.1 % graduated from high school, 41.9 % graduated from middle or higher level vocational/ technical training, and 35.3 % had an university degree. Of the mothers, 0.4 % did not finish high school, 35.5 % graduated from high school, 44.4 % graduated from middle or higher level vocational/ technical training, and 19.7 % had an university degree.

The current sample, called the family sample, was a subsample from an ongoing longitudinal study on relationships of adolescents with parents and friends, called CONAMORE (CONflict And Management Of RELationships; author reference). In the main study of CONAMORE, 938 early adolescents (mean age 12.4 years,  $SD = 0.6$ , ranging from 10-15 years) and 393 middle adolescents (mean age 16.7 years,  $SD = 0.8$ , ranging from 16-20 years) from twelve high schools located in the province of Utrecht, The Netherlands, annually filled out a battery of questionnaires at school. At the first measurement, the *Dutch early adolescents* received a letter including an invitation to participate with both parents during annual home-visits as well. Of the families invited, 491 families initially agreed to participate. Due to our restriction of including only two-parent Dutch families, 90 one-parent families who agreed to participate were not able to take part in this additional research project. For financial reasons, 323 families were randomly selected from the 401 two-parent families to participate from Wave 2 onwards. We refer to this sample as the family sample. In our analyses we only used families with complete data on the second measurement wave, resulting in a final sample consisting of 284 adolescents and both of their parents.

Analyses were performed to test whether there were differences between the adolescents who participated in the family sample ( $n = 284$ ) and those who did not ( $n = 360$ ). When selecting the comparison group, we controlled for the fact that only adolescents from intact Dutch families were invited to take part in the family sample. A MANOVA showed no differences between participants in the family sample and nonparticipants on adolescents' conflict resolution styles with fathers and mothers at wave 2:  $F(6, 636) = 1.95, p > .05$ , and an ANOVA showed no differences between participants and nonparticipants on adolescent delinquency at wave 2:  $F(1, 640) = 2.93, p > .05$ . In addition, analyses were performed to test whether there were differences between the original family sample ( $N = 323$ ) and the final sample ( $n = 284$ ). A MANOVA showed no differences between adolescents in the original sample and in the final sample on adolescents' conflict resolution styles with fathers and mothers at wave 2:  $F(6, 305) = 1.01, p > .05$  and on mothers' and fathers' conflict resolution styles with adolescents at wave 2:  $F(6, 301) = .71, p > .05$ . Also, an ANOVA showed no differences between adolescents in the original sample and in the final sample on adolescent delinquency at wave 2:  $F(1, 308) = 1.22, p > .05$ .

### 2.2.2 Procedure

Before the study, both adolescents and their parents received written information and, if the adolescent wished to participate, were required to provide written informed consent.

Interviewers visited the schools and asked participating adolescents to gather in classrooms to fill out a questionnaire. Interviewers also visited the families at home. During these home visits, adolescents filled out an additional questionnaire and both parents also filled out a questionnaire. The adolescents and their parents were instructed to fill out the questionnaire independent from each other. Confidentiality was guaranteed. Families received € 27,- for participation (approximately US \$ 34) and adolescents received an additional amount of € 10,- for participating at school (approximately US \$ 13).

### 2.2.3 Measures

*Conflicts.* Number of conflicts with fathers and mothers was measured using an Interpersonal Conflict Questionnaire (Laursen, 1993b; 1995). Adolescents had to rate on a 5-point Likert scale how often, ranging from *never* to *often*, they have had an argument or fight with father and mother for 35 issues over the past seven days. The issues covered topics such as ‘manners’, ‘watching too much TV, or using the computer or phone too much’, ‘privacy’, ‘not doing what you are asked to do’, ‘appearances and clothing’, ‘homework’, and ‘being honest’. The last item included the option ‘other’, that adolescents could use to fill out an additional conflict topic not covered by the list. The 35 items were averaged to compute mean scores for conflict with fathers and mothers. Cronbach’s alphas on these scores were .94 for conflicts with both fathers and mothers, indicating good reliability (Henson, 2001).

*Conflict affect.* Conflict affect was also measured using Laursen’s Interpersonal Conflict Questionnaire (1993b, 1995). Adolescents had to rate on a 5-point Likert scale, ranging from *friendly* to *angry* how they generally felt during conflicts with fathers and mothers, and also how they felt after these conflicts. Additionally, they had to rate how these conflicts influenced the relationship with fathers and mothers on a 5-point Likert scale ranging from *making the relationship better* to *making the relationship worse*. The three items were averaged to compute mean scores for conflict affect with fathers and mothers.

*Conflict resolution styles.* Conflict resolution styles were measured by Kurdek’s Conflict Resolution Style Inventory (CRSI; Kurdek, 1994). This questionnaire, originally designed for couples, was modified so that it referred to parents and adolescents. Three conflict resolution styles were used in this study: Conflict engagement, withdrawal, and positive problem solving. Adolescents rated the extent to which they used these three conflict resolution styles during conflicts with fathers and mothers. Also, fathers and mothers rated the extent to which they used the same three conflict resolution styles during conflicts with their adolescents. Each conflict resolution style was measured by 5 items and the items were rated

on a 5-point Likert scale ranging from *never* to *always*. Conflict engagement involved being verbally abusive, getting very angry, or losing self-control and was measured by items such as: ‘getting furious and losing my temper’, and ‘letting myself go and saying things I do not really mean’. Withdrawal implied avoiding the problem, avoid talking, and becoming distant. Items used to measure withdrawal were for example: ‘not listening anymore’, ‘refusing to talk any longer’, and ‘withdrawing from the situation’. Positive problem solving involved making compromises and discussing the conflict effectively. Sample items of positive problem solving were: ‘negotiating and trying to find a solution that is mutually acceptable’ and ‘sitting down and discussing the differences of opinion’ Cronbach’s alphas of the subscales conflict engagement, withdrawal, and positive problem solving ranged from .79 to .90 for adolescents’ conflicts with fathers, ranged from .75 to .84 for adolescents’ conflicts with mothers, ranged from .69 to .77 for fathers’ conflicts with adolescents, and ranged from .68 to .79 for mothers’ conflicts with adolescents, indicating sufficient internal consistency of these scales (Henson, 2001).

*Delinquency.* Delinquency was measured by a 16-item questionnaire, adapted from Baerveldt, Van Rossem & Vermande (2003), designed to measure minor offences. Adolescents were asked to indicate on a 4-point score ranging from *never* to *four times or more* how often they had shown certain forms of delinquent behaviors during the last 12 months. Sample items were ‘stolen a bike’, ‘deliberately broken something at the street’, ‘started a fire’, and ‘used drugs’. Cronbach’s alpha of the scores on this scale was .80, indicating adequate internal consistency of this scale (Henson, 2001).

#### **2.3.4 Strategy of Analyses**

To investigate the link between adolescents’ and their parents’ use of conflict resolution styles and adolescent delinquency, we performed hierarchical multiple regressions for conflict resolution with fathers and mothers separately. In these regression analyses, demographic variables such as adolescents’ sex, the educational level of adolescents, and the educational level of either fathers or mothers were entered at the first step. We controlled for the amount of conflicts and conflict-affect with either fathers or mothers at step two. To investigate how adolescents’ conflict resolution styles with fathers or mothers were related to delinquency, we entered conflict engagement, withdrawal, and positive problem solving of adolescents with fathers or mothers at the third step. To examine whether parents’ conflict resolution styles were related to adolescent delinquency, we entered conflict engagement, withdrawal, and positive problem solving of fathers or mothers at the fourth step. Finally, to investigate

whether specific combinations of conflict resolution styles were related to adolescent delinquency, the two demand-withdraw interactions as well as the interaction of adolescent and parent conflict engagement were entered at step five.

Before creating interaction terms, the conflict resolution styles of adolescents and parents were centered by subtracting the overall mean from each participant's score to avoid multicollinearity between the main effects and the interaction terms (Jaccard, Turrisi, & Wan, 1990). Significant interactions were followed up by computing the slope of adolescent delinquency on the conflict resolution score of one dyad member for different levels of conflict resolution of the other dyad member. That is, we computed the slope when the other member's conflict resolution style score was low (more than one standard deviation below the mean), average (between one standard deviation above and below the mean), and high (more than one standard deviation above the mean).

### 2.3 Results

The means and standard deviations of the variables used in the regressions are shown in Table 2.1. The scores of the sample on these variables are rather low, which is in line with the fact that subjects were drawn from a non-clinical population.

#### 2.3.1 Correlations

Pearson correlations, presented in Table 2.2, were computed to examine cross-sectional bivariate associations between the conflict measures and adolescent delinquency. We also computed Pearson correlations between conflict resolution in the adolescent-father and adolescent-mother relationship. Conflict engagement of adolescents with fathers and mothers was highly related ( $r = .81, p < .01$ ), indicating that when adolescents use more conflict engagement with fathers they also use more conflict engagement with mothers. The same was true for withdrawal ( $r = .79, p < .01$ ), and for positive problem solving of adolescents ( $r = .76, p < .01$ ). Conflict engagement of fathers and mothers with adolescents was also significantly correlated, but this correlation was lower ( $r = .21, p < .01$ ). The same was true for withdrawal ( $r = .28, p < .01$ ), and for positive problem solving of fathers and mothers ( $r = .13, p < .05$ ). Thus, it seems that adolescents are using the conflict resolution styles similarly with both parents, but fathers and mothers are using the styles differently with their adolescents.

Table 2.1

*Means and Standard Deviations of the Conflict Measures and Adolescent Delinquency*

	Fathers	Mothers
	(N=284)	(N=284)
	<i>M (SD)</i>	<i>M (SD)</i>
Conflicts with parents	1.64 (.51)	1.74 (.52)
Conflict affect in conflicts with parents	2.79 (.85)	2.67 (.75)
Conflict engagement of adolescents with parents	1.32 (.50)	1.43 (.54)
Withdrawal of adolescents with parents	1.80 (.77)	1.94 (.70)
Positive problem solving of adolescents with parents	3.04 (.98)	3.17 (.88)
Conflict engagement of parents with adolescents	1.72 (.48)	1.75 (.49)
Withdrawal of parents with adolescents	1.66 (.56)	1.59 (.54)
Positive problem solving of parents with adolescents	3.66 (.58)	4.01 (.54)
Adolescent self-reported delinquency	1.10 (.21)	

### 2.3.2 Regressions

The results of the hierarchical regression analyses are displayed in Table 2.3. At step 5, the final model is shown. Sex of adolescents was significantly related to delinquency, indicating that adolescent boys in our sample had higher levels of delinquency than adolescent girls. Conflicts were positively related to delinquency, meaning that adolescents in our sample who experienced more conflicts with both fathers and mothers had higher levels of delinquency than adolescents who experienced fewer conflicts. Conflict affect with fathers and mothers was not significantly related to delinquency.

*Adolescents' conflict resolution styles and delinquency.* Hypothesis 1 was partly supported in the adolescent-father and adolescent-mother relationship: Conflict engagement of adolescents was significant in adolescent-father relationships in step 3 as well as in step 4 ( $p < .05$ , see Table 2.3). However, after adding the interactions the main effect of adolescent conflict engagement became nonsignificant. In the adolescent-mother relationship, higher levels of conflict engagement by adolescents were significantly related to delinquency, but only in combination with higher levels of conflict engagement by mothers as well. Withdrawal and positive problem solving were not found to be significantly related to delinquency in the adolescent-father and adolescent-mother relationship.

Table 2.2

*Pearson Correlations between Number of Conflicts, Conflict Affect, Conflict Resolution Styles, and Delinquency*

	1	2	3	4	5	6	7	8	9
1. Conflicts with fathers/ mothers	-	.29**	.44**	.45**	-.10	.13*	.24**	-.03	.34**
2. Conflict affect in conflicts with fathers/ mothers	.29**	-	.33**	.39**	-.25**	.11	.20**	-.06	.11
3. Conflict engagement of adolescents	.44**	.30**	-	.46**	-.04	.19**	.25**	-.04	.22**
4. Withdrawal of adolescents	.50**	.40**	.46**	-	-.17**	.12*	.27**	-.05	.16**
5. Positive problem solving of adolescents	-.05	-.29**	-.12*	-.22**	-	.00	.04	.03	-.02
6. Conflict engagement of fathers/ mothers	.05	.15*	.15**	-.02	-.02	-	.42**	-.05	.15*
7. Withdrawal of fathers/ mothers	.07	.12*	.25**	.15*	-.11	.40**	-	-.09	.15**
8. Positive problem solving of fathers/ mothers	.03	.00	-.03	-.06	.11	-.13*	-.14*	-	.02
9. Adolescent delinquency	.34**	.17**	.26**	.17**	-.01	.06	.09	-.07	-

*Note.* Correlations below the diagonal involve adolescent-father relationships and correlations above the diagonal involve adolescent-mother relationships.

\* $p < .05$ . \*\* $p < .01$ .

Table 2.3

*Relation between Adolescents' and their Parents' Conflict Resolution Styles and Delinquency*

Predictors:	Delinquency			
	Fathers		Mothers	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Step 1		.04**		.04**
Sex of adolescents	-.19**		-.19**	
Educational level of adolescents	-.03		-.04	
Educational level of fathers/ mothers	-.06		.00	
Step 2		.13**		.11**
Sex of adolescents	-.22**		-.19**	
Educational level of adolescents	.01		-.04	
Educational level of fathers/ mothers	-.05		.02	
Conflicts with fathers/ mothers	.32**		.32**	
Conflict affect in conflicts with fathers/ mothers	.10		.04	
Step 3		.02		.01
Sex of adolescents	-.23**		-.21**	
Educational level of adolescents	.01		-.04	
Educational level of fathers/ mothers	-.05		.01	
Conflicts with fathers/ mothers	.26**		.28**	
Conflict affect in conflicts with fathers/ mothers	.09		.03	
Conflict engagement of adolescents	.16*		.11	
Withdrawal of adolescents	-.01		.01	
Positive problem solving of adolescents	.03		.04	
Step 4		.01		.01
Sex of adolescents	-.23**		-.20**	
Educational level of adolescents	.01		-.03	
Educational level of fathers/ mothers	-.04		.01	
Conflicts with fathers/ mothers	.27**		.27**	
Conflict affect in conflicts with fathers/ mothers	.09		.02	
Conflict engagement of adolescents	.15*		.10	
Withdrawal of adolescents	-.02		.00	
Positive problem solving of adolescents	.04		.03	

Table 2.3 (continued)

Predictors:	Delinquency			
	Fathers		Mothers	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Conflict engagement of fathers/ mothers	-.03		.05	
Withdrawal of fathers/ mothers	.05		.03	
Positive problem solving of fathers/ mothers	-.06		.03	
Step 5		.06**		.03*
Sex of adolescents	-.22**		-.21**	
Educational level of adolescents	.03		-.03	
Educational level of fathers/ mothers	-.06		.01	
Conflicts with fathers/ mothers	.25**		.26**	
Conflict affect in conflicts with fathers/ mothers	.10		.01	
Conflict engagement of adolescents	.06		.10	
Withdrawal of adolescents	.00		.00	
Positive problem solving of adolescents	.06		.03	
Conflict engagement of fathers/ mothers	-.04		.05	
Withdrawal of fathers/ mothers	.02		.02	
Positive problem solving of fathers/ mothers	-.06		.02	
A conflict engagement x F/ M withdrawal	.16*		-.09	
A withdrawal x F/ M conflict engagement	.04		-.02	
A conflict engagement x F/ M conflict engagement	.11		.21**	
$R^2$ Total		.25**		.20**

Note. A = Adolescent; F = Father; M = Mother.

\* $p < .05$ . \*\* $p < .01$ .

*Parental conflict resolution styles and delinquency.* Hypothesis 2 was not confirmed in the adolescent-father relationship in that higher levels of conflict engagement by fathers were not found to be significantly related to delinquency. In the adolescent-mother relationship, higher levels of conflict engagement by mothers were significantly related to delinquency, but only in combination with higher levels of conflict engagement of adolescents as well, thus partly supporting Hypothesis 2. With regard to withdrawal, exploratory analyses revealed that higher levels of withdrawal by fathers were significantly related to delinquency, but only in

combination with higher levels of conflict engagement by adolescents. Withdrawal of mothers was not significantly related to delinquency. Positive problem solving of fathers and mothers was not found to be significantly related to delinquency.

*Combinations of adolescents' and parents' conflict resolution styles and delinquency.*

The most important finding was that *combinations* of conflict resolution styles were found to be related to delinquency. Although the expected parent demand-adolescent withdraw interaction was not found to be significant, exploratory analyses showed that the demand-withdraw pattern in which the adolescents used higher levels of conflict engagement and father used higher levels of withdrawal was found to be significantly related to delinquency. The demand-withdraw interaction, characterized by conflict engagement of adolescents and withdrawal of fathers, is represented in Figure 2.1. Following up this interaction revealed that higher levels of conflict engagement of adolescents were associated most strongly with higher levels of delinquency when fathers used higher levels of withdrawal ( $\beta = .53, p < .01$ ). Higher levels of conflict engagement of adolescents were also significantly, although less strongly, related to higher levels of delinquency when fathers used medium levels of withdrawal ( $\beta = .23, p < .01$ ). When fathers used low levels of withdrawal, higher levels of conflict engagement of adolescents were not significantly associated with higher levels of delinquency ( $\beta = -.07, p > .05$ ). In other words, delinquency of adolescents was highest when adolescents scored highest on conflict engagement and fathers scored highest on withdrawal. Both demand-withdraw interactions, that is, conflict engagement by adolescents and withdrawal by mothers as well as withdrawal by adolescents and conflict engagement by mothers, were not significantly related to delinquency.

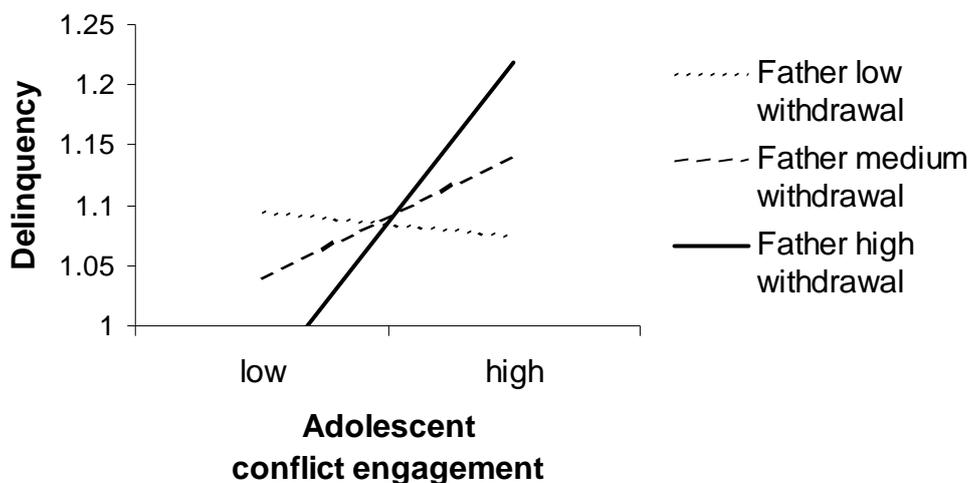


Figure 2.1. The demand-withdraw interaction in adolescent-father relationships.

The interaction of adolescent and mother conflict engagement was found to be significantly related to delinquency, confirming hypothesis 3 regarding mutual hostility in the adolescent-mother relationship. The mutual hostility interaction is represented in Figure 2.2. Following up this interaction revealed that higher levels of conflict engagement of adolescents were associated with more delinquency especially when conflict engagement of mothers was high as well ( $\beta = .48, p < .01$ ). Higher levels of conflict engagement of adolescents were also associated, although less strongly, with higher levels of delinquency when mothers used medium levels of conflict engagement ( $\beta = .17, p < .01$ ). Finally, higher levels of conflict engagement of adolescents were not related to delinquency when mothers used low levels of conflict engagement ( $\beta = -.05, p > .05$ ). In other words, delinquency of adolescents was highest when both adolescents and mothers scored highest on conflict engagement. The interaction of conflict engagement by both adolescents and fathers was found to be nonsignificant.

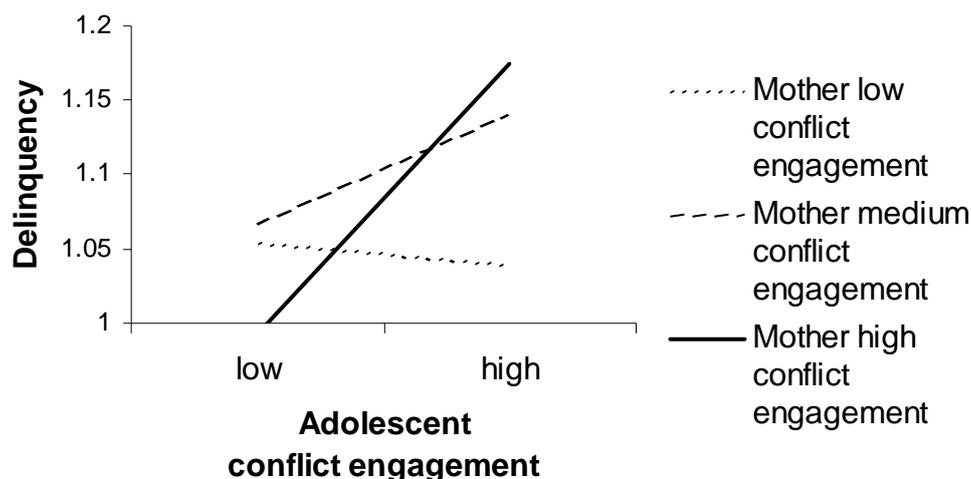


Figure 2.2. The mutual hostility interaction in adolescent-mother relationships.

To explore the possible effects of sex of adolescent on these results, we performed additional regression analyses in which the 2-way interaction terms of sex of adolescent with conflicts with fathers and mothers, conflict affect with fathers and mothers, the conflict resolution styles by adolescents, the conflict resolution styles by parents, and the 3-way interaction terms of sex of adolescent and the interactions between adolescents' and parents' styles were entered as a sixth step. Only one significant effect out of the 22 possible effects was found. However, following up this interaction revealed that positive problem solving of

fathers was neither significantly related to delinquency for boys ( $\beta = -.16, p > .05$ ), nor for girls ( $\beta = .07, p > .05$ ). Thus, sex of adolescents did not moderate the main effects and the interaction effects. For clarity of presentation, these coefficients are not included in Table 2.3.

## 2.4 Discussion

The purpose of the present study was to investigate how conflict resolution styles of both adolescents and parents are related to adolescent delinquency. The results show that mainly *combinations* of conflict resolution styles adolescents and parents use in their conflicts are related to adolescent delinquency, which corresponds with theories emphasizing bidirectionality and interdependence in parent-adolescent relationships (e.g., Hinde, 1997; Lollis & Kuczynski, 1997; Kashy & Kenny, 1990; Kenny & Cook, 1999; Minuchin, 1985; Stafford & Bayer, 1993).

Supporting coercion theory (Dishion et al., 1992; Patterson, 1982, 1995), the combination of conflict engagement by both adolescents and mothers was found to be significantly related to delinquency. However, this combination was not found to be significantly related to delinquency in adolescent-father relationships. Although we did not examine coercive interaction patterns in which adolescents' and parents' conflict engagement reciprocally influence each other within specific interactions, the finding that adolescents report more delinquent behavior when both adolescents and mothers use more conflict engagement on average, suggests that the combination of these conflict resolution styles might be important. Future research should examine whether mothers and adolescents reciprocally influence each other with these conflict resolution styles. The finding that mutual hostility was only related to delinquency in adolescent-mother relationships is in accordance with research on problem-solving interactions in families with delinquent children (Krinsley & Bry, 1991; Sanders et al., 1992). Again, future research is needed that assesses reciprocal patterns in these conflict resolution behaviors.

Adolescents revealed higher levels of delinquency when adolescents reported higher levels of conflict engagement and when fathers reported higher levels of withdrawal. Higher levels of withdrawal might be viewed as disengagement, lack of involvement, and as little or no attempt to work conflicts out. A study among fifteen to sixteen year old adolescents found that lower feelings of being loved by the parent and lower parental concern was stronger related to adolescent delinquent behavior in the adolescent-father relationship than in the adolescent-mother relationship. Also, the connection between higher levels of withdrawal by

father and delinquency might be explained by withdrawing fathers monitoring less than nonwithdrawing fathers. Low levels of monitoring and supervision have been found to be associated with adolescent delinquency (Patterson & Stouthamer-Loeber, 1984). Therefore, this might explain why higher levels of withdrawal by fathers were related to delinquency. However, this is an area for further investigation. In contrast to research on substance use (Caughlin & Malis, 2004b), with delinquency we did not find the combination of adolescent withdrawal and parent conflict engagement to be significantly related to delinquency.

The differential findings concerning withdrawal of fathers and conflict engagement of mothers in interaction with adolescents' conflict engagement might also be related to findings on gender differences in conflict behavior during marital conflicts, which showed that men tend to withdraw while women tend to demand (Christensen & Heavey, 1990). Moreover, marital satisfaction has been found to decrease when women used more conflict engagement and men withdrew more from marital conflicts (Kurdek, 1995). Our results show the detrimental correlates of the use of these gender-stereotypically conflict resolution styles by parents when facing demanding adolescents: Whereas demand of mothers might contribute to the escalation of conflict, withdrawal of fathers might imply lower paternal involvement and both interactions are related to higher levels of adolescent delinquency.

A consistent finding in this study was the relation of adolescent conflict engagement in the relationship with both mothers and fathers and adolescent delinquency, even after controlling for number of conflicts and conflict affect. Adolescent conflict engagement was found to be significantly related to delinquency either as a main effect or in interaction with a style of the parent. This is an indication that adolescents who use this ineffective conflict resolution style tend to be more delinquent. A conflict resolution style by adolescents characterized by attack, display of anger, and impulsiveness has already been found to be positively related to adolescent delinquency (Jaffee & D'Zurilla, 2003; Rubenstein & Feldman, 1993; Sanders et al., 1992). Adolescents who respond angrily to parent-adolescent conflicts are obviously not able to cope adequately with conflicts. According to the social problem solving model, these adolescents might also respond less appropriately and adaptively to problematic situations outside the home (Chang et al., 2004; Jaffee & D'Zurilla, 2003) and display delinquent behavior in these situations. We found no significant relations between the use of withdrawal and positive problem solving by adolescents and delinquency. These results may be partially explained by a study that found that delinquency was more related to higher levels of dysfunctional problem-solving of adolescents than to lower levels of positive problem solving (Jaffee & D'Zurilla, 2003).

Our hypotheses regarding the main effects of parents were only partly confirmed. Although we expected higher levels of conflict engagement by parents to be related to higher levels of adolescent delinquency, only *mothers'* use of conflict engagement was significantly related to adolescent delinquency, but only when adolescents also used higher levels of conflict engagement. Exploratory analyses revealed that higher levels of withdrawal by fathers were only found to be related to delinquency in combination with higher levels of conflict engagement by adolescents. Finally, with regard to the effect of positive problem solving by parents on delinquency, we found no significant effects. Thus, although a study by Borduin and colleagues (1985) found that mothers from families with delinquent adolescents used lower levels of constructive conflict resolution than mothers from families with nondelinquent adolescents and that this difference was not observable in the adolescent-father relationship, we did not find a significant association for both the adolescent-mother and adolescent-father relationship. However, whereas the former results were based on the difference between families with clinical versus nonclinical adolescents, our results were in concordance with earlier findings on the relation between conflict resolution styles and delinquent behavior in a nonclinical group (Jaffee & D'Zurilla, 2003) and with findings on minor delinquency (Klein et al., 1997). Thus, inconsistencies in findings by previous research on the relation between conflict resolution styles and delinquency might be accounted for by the fact that some studies were carried out using a clinical sample or an at-risk group, whereas other studies, including ours, were undertaken using a nonclinical sample.

Strength of the current study is the inclusion of parents' conflict resolution styles in conflicts with their adolescents, which enabled us to examine the combination of parents' and adolescents' conflict resolution in relation to delinquency. Furthermore, we examined conflict resolution in the adolescent-father and adolescent-mother relationship separately, as research indicates that sex of the parent may be a more important influence on family relationships than sex of the adolescent (Russell & Saebel, 1997). However, as delinquent behavior is usually higher in boys than in girls (Coie & Dodge, 1998; Farrington, 2004), we did control for sex of adolescent in our analyses. Another strength of the study is that we controlled for both the number of conflicts and conflict-affect, which are found to be associated with adolescent problem behavior (Barber & Delfabbro, 2000; Borduin et al., 1985; Sanders et al., 1992; Shek, 1997, Tesser et al., 1989). This enabled us to assess the contribution of conflict resolution styles of adolescents and parents to adolescent delinquency independent of the number of conflicts and independent of conflict affect.

Despite the strengths of this study, this study has a number of limitations. Firstly, we used self-reports only to assess conflicts, conflict affect, conflict resolution styles, and adolescent delinquency. However, we used the parents' own report of their conflict resolution styles and related them to adolescents' report of their delinquency level. So, common method variance cannot explain that parental conflict resolution styles qualified the relation of adolescents' conflict resolution styles with delinquency. Yet, results might have been different when using for instance parents' report of adolescent delinquent behavior. Secondly, we used questionnaires in which adolescents and parents rated their conflict resolution style. This means that the combinations of scores on particular conflict resolution styles were not necessary based on real conflict situations and did not necessary involve sequences of conflict resolution behaviors. Although we did not test the coercion theory or observe demand-withdraw interactions directly, examining the combination of average conflict resolution patterns of parents and adolescents gives some indication that these interaction patterns might be important. Our study found comparable results using questionnaires, thereby extending previous research on conflicts between adolescents and parents using observational studies. A third limitation is the correlational design of the study. Conflict resolution might be a consequence of delinquency rather than a cause. Longitudinal studies are required to investigate whether conflict resolution styles cause adolescent delinquency or whether adolescent delinquency causes the use of certain conflict resolution styles. Finally, the explained variance was not very high. There are other variables besides the use of conflict resolution styles by adolescents and parents that might be related to adolescent delinquency. For example, as research indicates that adolescents with a certain personality type were found to be more vulnerable to parenting behaviors than others (Dubas, Gerris, Janssens, & Vermulst, 2002), personality might play a role in this process. Some adolescents might be more vulnerable to parents' conflict resolution styles than others and thus the way parents handle conflicts with them might have a greater impact on their behavior. Also, when adolescents get older and spend more time outside the family, interactions with deviant peers might become increasingly significant (Dishion, Andrews, & Crosby, 1995). However, as antisocial behavior might be learned in different ways and in different settings depending on the developmental stage the adolescent is in (Patterson, 1995), the family might play a relatively large role in our sample of early adolescents.

To conclude, the current study shows that especially *combinations* of conflict resolution styles adolescents and parents use in their conflicts are related to adolescent delinquency. Moreover, conflict resolution in adolescent-father and adolescent-mother relationships

appears to have different relations with delinquency. In the adolescent-father relationship, the demand-withdraw pattern characterized by higher levels of conflict engagement by adolescents and higher levels of withdrawal by fathers was significantly related to delinquency. In the adolescent-mother relationship, support was found for the mutual hostility hypothesis: The combination of higher levels of conflict engagement by both mothers and adolescents was found to be significantly related to delinquency. The results stress the interdependence of adolescents and parents in conflict resolution and demonstrate the need for investigating combinations of adolescents' and parents' conflict resolution style.



**Reciprocity of Conflict Resolution Styles in Parent-Adolescent Relationships: A  
Four-Wave Longitudinal Study<sup>2</sup>**

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<sup>2</sup> Van Doorn, M. D., Branje, S. J. T., Meeus, W. H. J. (2008). Reciprocity of conflict resolution styles in parent-adolescent relationships: A four-wave longitudinal study. *Manuscript resubmitted for publication.*

**Abstract**

In this study we investigated changes in conflict resolution styles in parent-adolescent relationships from early to middle adolescence. Moreover, we examined whether different parent-adolescent dyads can be distinguished based on the developmental configurations of conflict resolution styles. Questionnaires about conflict resolution styles were completed by 312 early adolescents ( $M = 13.3$  years) and both parents for four consecutive years. We found that positive problem solving of adolescents with mothers increased from early to middle adolescence and that conflict engagement and withdrawal with mothers declined around mid-adolescence. Adolescents' conflict resolution with fathers did not change on average, except for an increase of withdrawal. Both parents were found to decrease their use of conflict engagement and fathers increased their use of positive problem solving. Thus, it seems that both parents and adolescents matured in their use of conflict resolution from early to middle adolescence. In addition, we found two types of parent-adolescent dyads, one characterized by positive conflict resolution and one characterized by negative conflict resolution by both parents and adolescents. These either positive or negative pathways of conflict resolution in parent-adolescent relationships were maintained by both parents and adolescents.

### 3.1 Introduction

Adolescence is a period in which many changes occur. Adolescents are striving for more autonomy and self-determination (Collins, 1990). Indeed, one of the most salient developmental tasks during adolescence is establishing oneself as an autonomous being (Eccles et al., 1993; Erikson, 1959; Steinberg, 1990). Ideally, parent-adolescent relationships gradually change during adolescence from a more vertical, asymmetrical relationship to a more horizontal, symmetrical relationship (Collins, 1990, 1995; Russell, Pettit, & Mize, 1998; Steinberg, 1990; Youniss & Smollar, 1985). Although parents encourage autonomy of their children and accept more symmetrical relations, they have as rule somewhat different expectations regarding the timing of appropriate autonomy for their adolescents (Deković, Noom, & Meeus, 1997). These changes into more symmetrical relationships might therefore go hand in hand with some friction between parents and adolescents. In fact, conflicts are exceptionally suited to renegotiate parental authority (Collins & Laursen, 2004; Sillars Canary, & Tafoya, 2004; Smetana, 1995).

Conflicts between adolescents and their parents are thus inevitable in this realignment process (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997). A meta-analysis showed that conflicts are most frequent during early adolescence and decline gradually thereafter (Laursen, Coy, & Collins, 1998). Moreover, the same meta-analysis found that conflicts seem to be more intense during middle adolescence than during early adolescence. This latter finding has been confirmed by other researchers (De Goede, Branje, & Meeus, 2008; Jensen-Campbell & Graziano, 2000). The combination of more frequent conflict during early adolescence, more intense conflicts during middle adolescence, and the gradual change into more symmetrical parent-adolescent relationships (De Goede et al., 2008) might be reflected by changes in the way parents and adolescents handle conflicts with each other during this period (Collins & Laursen, 2004). In this paper we distinguish three different conflict resolution styles: Positive problem solving, conflict engagement, and withdrawal. Positive problem solving involves trying to understand the other's position and using constructive reasoning to work out compromises. Conflict engagement involves being verbally abusive, angry, defensive or attacking, or losing self-control. Withdrawal involves avoiding the problem, avoiding to talk, and becoming distant (Kurdek, 1994).

### ***3.1.1 Development of Conflict Resolution Styles in Parent-Adolescent Relationships***

Ideally, the renegotiation process starts in early adolescence and parent-adolescent relationships start to become more egalitarian (Russell et al., 1998). Therefore we might expect that adolescents and parents will increase their use of positive problem solving. Several theorists argue that a more mature way of conflict resolution, characterized by more compromising and perspective taking, will develop in adolescents (e.g., Sandy & Cochran, 2000; Selman, 1980; Youniss & Smollar, 1985). Due to developmental changes in perspective taking, adolescents will be increasingly able to simultaneously consider both their own and the other's perspective and may be able to use more mature styles of conflict resolution (Sandy & Cochran, 2000). However, empirical evidence for an increase in positive problem solving is thin. That is, we only found one study that investigated changes in positive problem solving in adolescence and their results were rather mixed (Jensen-Campbell & Graziano, 2000). This particular study found positive problem solving in daughter-mother relationships to be higher for older adolescents than for younger adolescents, but found the opposite for son-mother relationships and failed to find an effect of age with regard to adolescents' positive problem solving with fathers. Parents are also expected to increasingly use positive problem solving in order to meet the new challenges of the parent-adolescent relationship and to allow the relationship to become more egalitarian. However, empirical evidence of changes in parental positive problem solving is lacking.

From a developmental point of view, we might expect parents and adolescents to decrease their use of conflict engagement during conflicts as this aggressive way of handling conflicts does not reflect developmental growth toward greater equality. However, an aggressive conflict resolution style has been found to be higher for middle adolescents than for early adolescents (Tucker, McHale, & Crouter, 2003). Also, as has been mentioned before, empirical studies showed that conflict intensity increased from early to middle adolescence and then decline (De Goede et al., 2008; Jensen-Campbell & Graziano, 2000; Laursen et al., 1998), which might be an indication that conflict resolution of parents and adolescents is temporarily characterized by more fighting and arguing from early to middle adolescence. No empirical studies have yet been done on the development of this aggressive style by parents.

With regard to the use of withdrawal during conflicts, our expectations are based on two different lines of reasoning. On the one hand, increasing withdrawal from conflicts by adolescents with age might be an indication of increasing autonomy of adolescents as it might imply withdrawing from parental supervision. Withdrawal might then be expected to increase. On the other hand, withdrawal is an unconstructive conflict resolution style that has been

found to be related to negative outcomes such as delinquency (e.g., Jaffee & D’Zurilla, 2003). Also, the use of withdrawal often results in unresolved conflicts, which have been found to be related to negative outcomes (Cummings, Simpson, & Wilson, 1993). Unresolved conflicts were found to be more common in middle than in early adolescence (Smetana, Yau, & Hanson, 1991). Thus, we might expect withdrawal by adolescents to increase from early to middle adolescence, at least temporarily. We have no specific expectations with regard to withdrawal of parents. In sum, although theory suggests that conflict resolution might change over time, empirical evidence is lacking or thin. Longitudinal studies are clearly needed to draw conclusions about within-individual change.

### ***3.1.2 Parent-Adolescent Conflict Resolution Types***

Although ideally all parent-adolescent relationships become gradually more egalitarian during adolescence, there is obviously a lot of variation in the way parent-adolescent relationships change. For some parent-adolescent dyads the realignment process from an asymmetrical parent-adolescent relationship towards a more egalitarian parent-adolescent relationship might be more stressful than for others. Stage-environment fit theory suggests that more tense parent-adolescent relationships will evolve when there is a poor fit between the adolescents’ desire for increasing autonomy and the opportunities for autonomy provided by the parents (Eccles et al., 1993). When we translate this to the development of conflict resolution styles, we might argue that it will be important for parents to respond in an appropriate way to conflicts, that is, by acknowledging the growing autonomy of the adolescent, being supportive, and setting limits while recognizing the perspective of the adolescent. Then, adolescents will also develop positive problem solving skills and more positive parent-adolescent relationships will emerge. For instance, late adolescents were psychologically healthier, showed lower psychological distress, and rated the cohesion of the family higher when they were treated in a trusted, respectful manner during conflicts (Fondacarro, Dunkle, & Pathak, 1998). Thus, for the development of adolescents’ conflict resolution styles with parents, it might be important that parents trust them and treat them with respect, as indicated by the way they handle conflicts.

In addition to stage-environment fit theory, family systems theory and other relationship theories might also be helpful in explaining changes in conflict resolution styles. According to these theories, parent-adolescent relationships are bidirectional and thus parents and adolescents are expected to mutually influence each other’s behavior (e.g., Hinde, 1997; Kenny & Cook, 1999; Lollis & Kuczynski, 1997; Minuchin, 1985; Stafford & Bayer, 1993).

This means that the way one dyad member behaves in conflicts with the other dyad member depends, to some extent, on the behavior of the other dyad member. More specifically, coercion theory (Patterson, 1982, 1995) might provide a rationale for expecting groups of parent-adolescent dyads with differences in the extent to which they use the aggressive conflict resolution style conflict engagement: According to coercion theory, children whose parents use a coercive parenting style towards them, also learn to use a coercive interpersonal style. This might be reflected by a group of parent-adolescent dyads that use relatively high levels of conflict engagement and a group that uses this aggressive style to a much lesser extent. In this study, we will investigate whether two groups of parent-adolescent dyads can be distinguished: One group, in which both parents and adolescents engage more in positive problem solving and less in conflict engagement and withdrawal, and another group, in which both parents and adolescents use more conflict engagement and withdrawal and less positive problem solving.

The current study involves two research questions. First, we will investigate changes in conflict resolution styles of parents and adolescents. We will investigate whether adolescents on average use more positive problem solving with parents from early to middle adolescence. Although empirical results are inconsistent (Jensen-Campbell & Graziano, 2000), based on theory (Sandy & Cochran, 2000; Selman, 1980; Youniss & Smollar, 1985), we hypothesize that adolescents' positive problem solving on average increases. We also expect an increase in parents' average use of positive problem solving with adolescents. Based on empirical results, we might expect an average increase of conflict engagement of adolescents (Laursen et al., 1998; Tucker et al., 2003). However, based on theory we might expect a decline of conflict engagement or perhaps a curvilinear growth pattern wherein conflict engagement rises and then declines. We expect a similar pattern of results for the use of withdrawal by adolescents, that is an increase of withdrawal or a curvilinear growth pattern wherein withdrawal increases and then decreases. We will explore the use of conflict engagement and withdrawal of parents.

Our second research question will be examined using a person-centered or typological approach. We will examine whether different groups of parent-adolescent dyads can be distinguished based on the conflict resolution styles they use. We will try to identify different groups of parent-adolescent dyads who have similar configurations of conflict resolution styles, because different conflict resolution styles are not used in isolation, but instead might form different patterns that typically go together. Thus, we will examine whether different groups of parent-adolescent dyads can be distinguished longitudinally that use distinctive

patterns of conflict resolution with each other. Based on the stage-environment fit theory, coercion theory (Eccles et al., 1993; Patterson, 1982, 1995) and theories that emphasize bidirectionality (e.g. Lollis & Kuczynski, 1997; Stafford & Bayer, 1993), we expect to find a group of parent-adolescent dyads who use more positive problem solving and less conflict engagement and withdrawal, and a group of parent-adolescent dyads who use less positive problem solving and more conflict engagement and withdrawal. All analyses will be performed separately for adolescent-mother and adolescent-father relationships.

## 3.2 Method

### 3.2.1 Participants

Participants in this four-year longitudinal study were 312 families, including an early adolescent (51.6% girls) and both parents. Data were collected with a one-year interval between each of the waves. The mean age of the adolescents at the beginning of this study was 13.3 years (ranging from 12 to 15 years,  $SD = 0.51$ ); the mean age of the fathers and mothers was respectively 46.82 years (ranging from 35 to 65,  $SD = 5.09$ ) and 44.20 years (ranging from 34 to 55 years,  $SD = 4.13$ ). All adolescents named Dutch as their main ethnic identity and they all lived with both parents. Different levels of education were represented, with approximately 56% of the adolescents at schools preparing for university, 34% of the adolescents at schools preparing for higher professional education and 10% of the adolescents at schools preparing for lower-level jobs. Of the fathers, 1.6% did not finish high school, 23.8% graduated from high school, 39.2% graduated from middle or higher level vocational/ technical training, and 35.4% had a university degree. Of the mothers, 0.6% did not finish high school, 36.8% graduated from high school, 42.9% graduated from middle or higher level vocational/ technical training, and 19.7% had a university degree.

The current sample, called the family sample, is a subsample from an ongoing longitudinal study on relationships of adolescents with parents and friends, called CONAMORE (CONflict And Management Of RELationships; Meeus et al., 2004). In the main study of CONAMORE, 938 early adolescents (mean age 12.4 years,  $SD = 0.6$ , ranging from 10-15 years) and 393 middle adolescents (mean age 16.7 years,  $SD = 0.8$ , ranging from 16-20 years) from twelve high schools located in the province of Utrecht, The Netherlands, annually filled out a battery of questionnaires at school. At the first measurement, the *Dutch early adolescents* received a letter including an invitation to participate with both parents during annual home-visits as well. Of the families invited, 491 families initially agreed to

participate. Due to our restriction of including only two-parent Dutch families, 90 one-parent families who agreed to participate were not able to take part in this additional research project. For financial reasons, 323 families were randomly selected from the 401 two-parent families to participate from the next measurement wave onwards. We will refer to the first measurement wave of the family sample as Time 1. In the current study, only Dutch adolescents who lived with both parents were included ( $n = 312$ ). From now on, we will refer to this final sample as the family sample. Missing values were estimated in SPSS, using relative mean substitution (Raaijmakers, 1999). In addition, remaining missing values were estimated in Mplus using full information maximum likelihood.

Analyses were performed to test whether there were differences between the adolescents who participated in the family sample ( $n = 312$ ) and those who did not ( $n = 342$ ). When selecting the comparison group, we controlled for the fact that only Dutch adolescents from intact families were invited to take part in the family sample. A MANOVA showed some differences between participants in the family sample and nonparticipants on adolescents' conflict resolution styles with fathers and mothers at Time 1:  $F(6,637) = 2.37, p < .05$ : Participants in the family sample used higher levels of positive problem solving with fathers and mothers, and higher levels of withdrawal with fathers. We found no differences on the level of conflict engagement with fathers and mothers, and on the level of withdrawal with mothers.

### **3.2.2 Procedure**

Before the study, both adolescents and their parents received written information and, if the adolescent wished to participate, all of them were required to provide written informed consent. Interviewers visited the schools and asked participating adolescents to gather in classrooms to fill out a questionnaire. Interviewers also visited the families at home. During these home visits, adolescents filled out an additional questionnaire and both parents also filled out a questionnaire. The adolescents and their parents were instructed to fill out the questionnaire independent from each other. Confidentiality was guaranteed. Families received €27 for participation (approximately US \$36) and adolescents received an additional amount of €10 for participating at school (approximately US \$13).

### 3.2.3 Measures

*Conflict resolution styles.* Conflict resolution styles were measured using Kurdek's Conflict Resolution Style Inventory (CRSI; Kurdek, 1994). This questionnaire, originally designed for couples, was modified so that it referred to parents and adolescents. Three conflict resolution styles were used in this study: Positive problem solving, conflict engagement, and withdrawal. Adolescents rated the extent to which they used these three conflict resolution styles during conflicts with fathers and mothers. Also, fathers and mothers rated the extent to which they used the same three conflict resolution styles during conflicts with their adolescents. Each conflict resolution style was measured by 5 items and the items were rated on a 5-point Likert scale with response options ranging from *never* to *always*. Positive problem solving involved making compromises and discussing the conflict effectively. Sample items of positive problem solving were: 'negotiating and trying to find a solution that is mutually acceptable' and 'sitting down and discussing the differences of opinion'. Conflict engagement involved being verbally abusive, getting very angry, or losing self-control and was measured by items such as: 'getting furious and losing my temper', and 'letting myself go and saying things I do not really mean'. Withdrawal implied avoiding the problem, avoid talking, and becoming distant. Items used to measure withdrawal were for example: 'not listening anymore', 'refusing to talk any longer', and 'withdrawing from the situation'.

Factor analyses showed the expected three-factor structure, both for adolescent-parent (all loadings  $> .40$ ) and parent-adolescent conflict resolution styles (all loadings  $> .31$ ). This factor structure has also been found by Kurdek (1994), with regard to the marital relationship. The temporal stability of the conflict resolution styles was moderately high, ranging from .53 to .70 in the adolescent-parent relationship, and from .43 to .73 in the parent-adolescent relationship, respectively. Cronbach's alphas of the subscales conflict engagement, withdrawal, and positive problem solving ranged from .72 to .89 for adolescents' conflicts with mothers, from .77 to .93 for adolescents' conflicts with fathers, from .68 to .84 for mothers' conflicts with adolescents, and from .69 to .84 for fathers' conflicts with adolescents, indicating sufficient internal consistency of these scales (Henson, 2001).

## 3.2 Results

### 3.3.1 Descriptives

The means and standard deviations of the variables used in the current study are shown in Table 3.1. Correlations between conflict resolution styles of adolescents with parents and parents with adolescents at Time 1 are presented in Table 3.2. We also computed Pearson correlations between conflict resolution in the adolescent-father and adolescent-mother relationship. Conflict engagement of adolescents with fathers and mothers was highly related within waves ( $r$  ranged from .71 to .81,  $p < .001$ ), indicating that when adolescents use more conflict engagement with fathers they also use more conflict engagement with mothers. The same was true for withdrawal ( $r$  ranged from .72 to .77,  $p < .001$ ), and for positive problem solving of adolescents ( $r$  ranged from .71 to .77,  $p < .001$ ). Conflict engagement of fathers

Table 3.1

*Means and Standard Deviations of the Conflict Resolution Styles in Parent-Adolescent Relationships*

	Wave 1 <i>M (SD)</i>	Wave 2 <i>M (SD)</i>	Wave 3 <i>M (SD)</i>	Wave 4 <i>M (SD)</i>
Conflict resolution of adolescents with mothers				
Positive problem solving	3.17 (.89)	3.16 (.92)	3.27 (.86)	3.34 (.83)
Conflict engagement	1.43 (.53)	1.46 (.53)	1.48 (.57)	1.40 (.51)
Withdrawal	1.95 (.70)	2.07 (.78)	2.06 (.78)	1.99 (.78)
Conflict resolution of adolescents with fathers				
Positive problem solving	3.02 (.98)	3.00 (1.02)	3.08 (1.00)	3.20 (.93)
Conflict engagement	1.32 (.50)	1.30 (.48)	1.40 (.61)	1.33 (.51)
Withdrawal	1.82 (.78)	1.88 (.83)	1.95 (.83)	1.95 (.84)
Conflict resolution of mothers with adolescents				
Positive problem solving	4.02 (.60)	4.01 (.54)	3.98 (.57)	3.98 (.53)
Conflict engagement	1.75 (.49)	1.69 (.47)	1.66 (.47)	1.61 (.48)
Withdrawal	1.59 (.54)	1.63 (.53)	1.59 (.53)	1.61 (.59)
Conflict resolution of fathers with adolescents				
Positive problem solving	3.64 (.60)	3.61 (.63)	3.68 (.56)	3.73 (.54)
Conflict engagement	1.72 (.48)	1.71 (.50)	1.68 (.51)	1.62 (.51)
Withdrawal	1.65 (.56)	1.70 (.56)	1.68 (.53)	1.72 (.60)

and mothers with adolescents was also significantly correlated within waves, but this correlation was lower than the correlation between conflict engagement of adolescents with fathers and mothers ( $r$  ranged from .21 to .32,  $p < .001$ ). The same was true for withdrawal ( $r$  ranged from .23 to .28,  $p < .001$ ), and for positive problem solving of fathers and mothers ( $r$  ranged from .11 to .21,  $p < .05$ ). Thus, it seems that adolescents are using the conflict resolution styles similarly with both parents. Levels of conflict resolution styles across mothers and father co-varied only to a small degree.

Table 3.2

*Time 1 Correlations between Conflict Resolution Styles of Adolescents with Parents and Parents with Adolescents*

	PS a-p	CE a-p	WI a-p	PS p-a	CE p-a	WI p-a
Positive problem solving a-p	-	-.10	-.21**	.11	.01	-.08
Conflict engagement a-p	-.03	-	.45**	-.01	.16**	.25**
Withdrawal a-p	-.18**	.45**	-	-.02	-.02	.15**
Positive problem solving p-a	.03	-.05	-.06	-	-.10	-.12*
Conflict engagement p-a	.01	.19**	.09	-.06	-	.39**
Withdrawal p-a	.07	.25**	.25**	-.10	.42**	-

*Note.* PS = Positive problem solving; CE = conflict engagement; WI = withdrawal; a-p = adolescents' conflict resolution with parents; p-a = parents' conflict resolution with adolescents. Correlations below the diagonal involve adolescent-mother relationships and correlations above the diagonal involve adolescent-father relationships.

\* $p < .05$ , \*\*  $p < .01$

### **3.3.2 Changes in Adolescents' and Parents' Conflict Resolution Styles: Univariate Latent Growth Curve Models**

To investigate adolescents' and parents' mean development of positive problem solving, conflict engagement, and withdrawal and their linkages, we performed 12 univariate latent growth models. For each conflict resolution style, a model was tested for adolescent-mother, adolescent-father, mother-adolescent, and father-adolescent relationships separately, resulting in a total of 12 models: 2 x 3 styles of adolescents with parents (mothers/ fathers) and 2 x 3 styles of parents (mothers/ fathers) with adolescents. We first tested a linear model. When adding a quadratic slope improved the model (as indicated by lower values of the Bayesian

Information Criterion and the Sample-Size Adjusted Bayesian Information Criterion) and/ or the mean or variance of the quadratic slope was significant, we used the model with the quadratic slope. When the mean and variance of the quadratic slope were both not significant, we used the model with the linear slope. To evaluate the fit of each model, we used the Comparative Fit Index (CFI), the Non-Normed Fit Index (NNFI, also known as Tucker-Lewis Index, TLI), and the Root Mean Square Error of Approximation (RMSEA). For values of CFI and NNFI/TLI, values above .90 indicate acceptable fit and values above .95 indicate good fit (Hu & Bentler, 1999). RMSEA values up to .08 represent an acceptable fit of the model.

Table 3.3

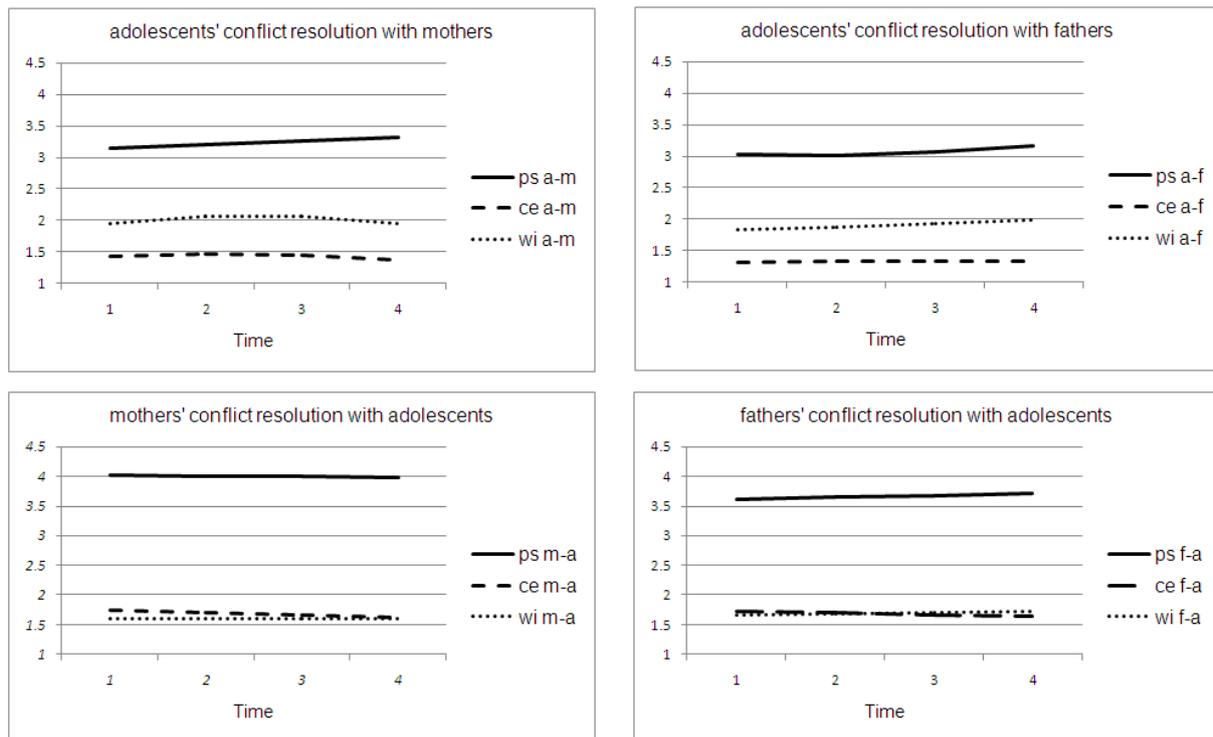
*Adolescents' and Parents' Mean Development of Conflict Resolution Styles*

	Intercept		Linear Slope		Quadratic Slope	
	<i>M</i>	$\sigma^2$	<i>M</i>	$\sigma^2$	<i>M</i>	$\sigma^2$
Adolescent-Mother						
Positive problem solving	3.14***	.49***	.06***	.02**		
Conflict engagement	1.43***	.19***	.07*	.00	-.03**	.00***
Withdrawal	1.96***	.28**	.15**	.10	-.05**	.01
Adolescent-Father						
Positive problem solving	3.02***	.79***	-.04	.48**	.03	.04***
Conflict engagement	1.32***	.14***	.01	.01*		
Withdrawal	1.83***	.40***	.05**	.02*		
Mother-Adolescent						
Positive problem solving	4.02***	.13***	-.01	.00		
Conflict engagement	1.74***	.18***	-.04***	.01**		
Withdrawal	1.60***	.16***	.00	.01*		
Father-Adolescent						
Positive problem solving	3.62***	.22***	.03**	.01		
Conflict engagement	1.73***	.17***	-.03***	.00		
Withdrawal	1.66***	.31***	.02	.14***	.00	.01*

\* $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$

In four out of twelve models we found that the model with the quadratic slope fitted the data better than the model with the linear slope only (See Table 3.3). The models fitted the

data sufficiently both for adolescent-mother relationships (CFI's range from .97 to 1.00, TLI's range from .97 to 1.00, and RMSEA's range from .00 to .08) and adolescent-father relationships (CFI's range from .92 to 1.00, TLI's range from .91 to 1.00, and RMSEA's range from .00 to .07, with one exception of .11). Table 3.3 shows the intercepts and slopes of positive problem solving, conflict engagement, and withdrawal of adolescents and parents. In Figure 3.1 changes in conflict resolution styles of adolescents and parents are shown.



*Figure 3.1.* Changes in Conflict Resolution Styles in Parent-Adolescent Relationships. ps = positive problem solving, ce = conflict engagement, wi = withdrawal, a-m = adolescents' conflict resolution with mothers, a-f = adolescents' conflict resolution with fathers, m-a = mothers' conflict resolution with adolescents, f-a = fathers' conflict resolution with adolescents.

We found that whereas positive problem solving of adolescents with mothers significantly increased, positive problem solving of adolescents with fathers did not change. The development of conflict engagement and withdrawal by adolescents with mothers was curvilinear: First conflict engagement and withdrawal of adolescents with mothers increased, then it decreased. With regard to adolescents' changes in conflict engagement with fathers, we found no significant change. Withdrawal of adolescents with fathers significantly increased. Thus, we found a linear increase of positive problem solving, an increase of conflict

engagement and withdrawal between Time 1 and Time 3, followed by a decrease between Time 3 and Time 4 in the adolescent-mother relationship, and a linear increase of withdrawal in the adolescent-father relationship.

Positive problem solving of mothers did not change on average, but positive problem solving of fathers significantly increased. Conflict engagement of both mothers and fathers was found to significantly decrease over time, and we found on average no change in the use of withdrawal by mothers and fathers. Thus, changes in conflict resolution styles by parents were remarkably similar for fathers and mothers except for the changes in positive problem solving.

### ***3.3.3 Parent-Adolescent Conflict Resolution Types: Latent Class Growth Analyses***

To answer the second research question, that is, can different groups of parent-adolescent dyads be distinguished based on their conflict resolution styles, we performed Latent Class Growth Analyses (LCGA) with the scores on the three conflict resolution styles of parents and adolescents at the four waves as input variables. Again, analyses were performed separately for adolescent-mother and adolescent-father relationships. To decide the optimal number of classes, we inspected the Bayesian Information Criterion (BIC) and the Sample-Size Adjusted Bayesian Information Criterion (SSA-BIC). Lower values on these criteria indicate improvement of the model when compared to the model with one less class. Also, the bootstrap Lo-Mendell-Rubin likelihood ratio test (LMR-RT; Lo, Mendell, & Rubin, 2001) should lead to a significant increase in fit when adding a class.

Latent Class Growth Analyses showed that two meaningful different groups of adolescent-mother dyads could be distinguished. Although we found slightly lower BIC and SSA-BIC values for the three class solution (see Table 3.4), the LMR-RT test did not reveal a significant increase in fit in the three class solution ( $p = .12$ ). Table 3.5 shows the mean intercepts and slopes of the two different groups that were found in adolescent-mother relationships. We found that mothers of the first group ( $n = 223$ ) used significantly higher levels of positive problem solving than mothers of the second group ( $n = 89$ ;  $p < .01$ ). Furthermore, mothers and adolescents of the first group used significantly lower levels of conflict engagement and withdrawal than mothers and adolescents of the second group (for withdrawal of adolescents  $p < .05$ , for the other conflict resolution styles  $p < .01$ ). We also found that in the first group positive problem solving of adolescents significantly increased and that conflict engagement of mothers in the first group significantly decreased. However,

Table 3.4

*Model Fit Indices of One, Two, and Three Class Solution of Parent-Adolescent Conflict Resolution Types*

	BIC	SSA-BIC
Adolescent-Mother dyads		
1 - class solution	13852.59	13738.41
2 - class solution	12939.30	12783.88
3 - class solution	12697.39	12500.75
Adolescent-Father dyads		
1 - class solution	14566.38	14452.20
2 - class solution	13641.59	13486.18
3 - class solution	13336.49	13139.85

these slopes were not significantly different from the slopes in the second group. In sum, we found differences between the two groups of adolescent-mother relationships on the intercepts of positive problem solving, conflict engagement, and withdrawal: Compared to the second group, mothers in the first group used higher levels of positive problem solving and both mothers and adolescents used lower levels of conflict engagement and withdrawal. We also found a significant increase in positive problem solving by adolescents and a significant decrease of conflict engagement by mothers in the first group, but not in the second. Figure 3.2 shows graphical representations of the changes in conflict resolution styles for these two groups.

Latent Class Growth Analyses showed that two meaningful different groups of adolescent-father dyads could be distinguished as well. When comparing the two class solution to the three class solution, we found slightly lower BIC and SSA-BIC values for the three class solution (see Table 3.4). However, the LMR-RT test did not reveal a significantly increase in fit in the three class solution ( $p = .75$ ). Table 3.5 shows the mean intercepts and slopes of the two different groups that were found in adolescent-father relationships. We found that fathers and adolescents of the first group ( $n = 221$ ) used significantly lower levels of conflict engagement and withdrawal than fathers and adolescents of the second group ( $n = 91$ ; for withdrawal of adolescents  $p < .05$ , for the other conflict resolution styles  $p < .01$ ). There were no differences between the groups of adolescent-father dyads on the level of positive problem solving. We also found that in the first group positive problem solving of both adolescents and fathers significantly increased and that conflict engagement of fathers in

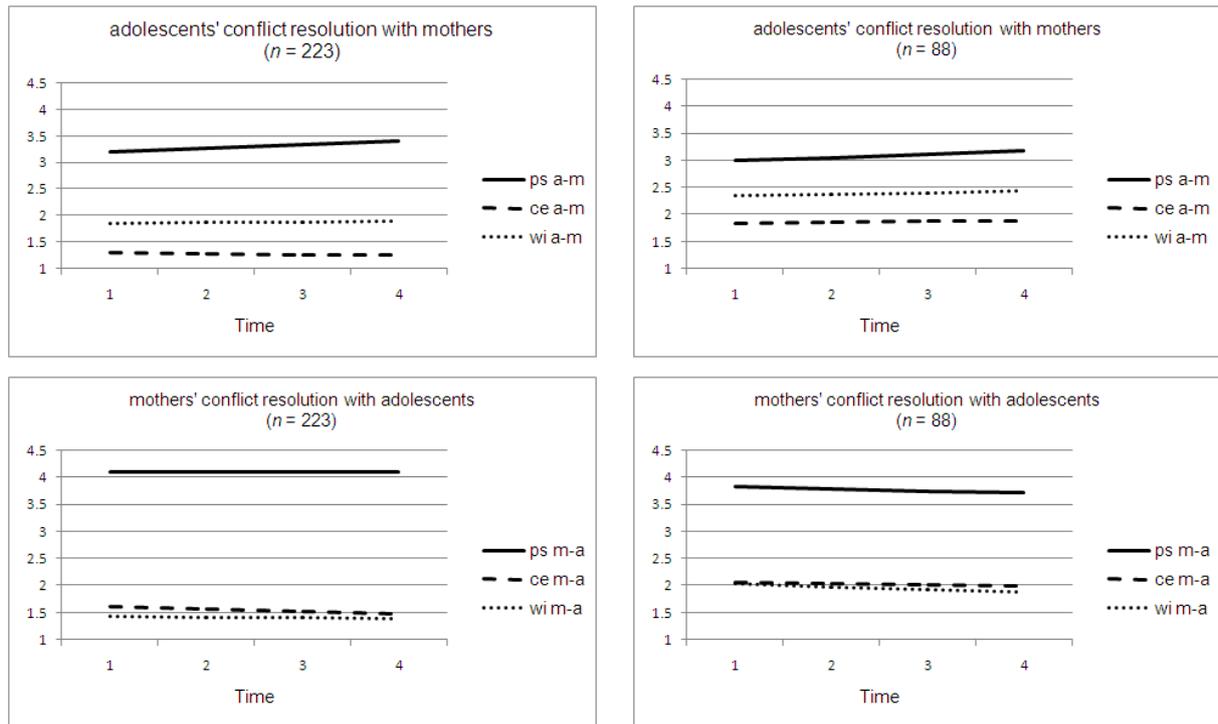
Table 3.5

*Mean Intercepts and Slopes of the Two Different Groups of Parent-Adolescent Conflict Resolution Types*

	Group 1 (n = 224)		Group 2 (n = 88)	
	Intercept	Slope	Intercept	Slope
<b>Adolescent-Mother</b>				
Positive problem solving	3.20***	0.07***	2.99***	0.06
Conflict engagement	1.31*** <sup>a</sup>	-0.02	1.83*** <sup>b</sup>	0.02
Withdrawal	1.86*** <sup>a</sup>	0.01	2.34*** <sup>b</sup>	0.03
<b>Mother-Adolescent</b>				
Positive problem solving	4.09*** <sup>a</sup>	-0.00	3.83*** <sup>b</sup>	-0.04
Conflict engagement	1.62*** <sup>a</sup>	-0.05***	2.05*** <sup>b</sup>	-0.02
Withdrawal	1.44*** <sup>a</sup>	-0.02	2.03*** <sup>b</sup>	0.05
	Group 1 (n = 221)		Group 2 (n = 91)	
	Intercept	Slope	Intercept	Slope
<b>Adolescent-Father</b>				
Positive problem solving	3.10***	0.07**	2.71***	0.05
Conflict engagement	1.18*** <sup>a</sup>	0.00	1.64*** <sup>b</sup>	0.04
Withdrawal	1.70*** <sup>a</sup>	0.04*	2.15*** <sup>b</sup>	0.07*
<b>Father-Adolescent</b>				
Positive problem solving	3.67***	0.04**	3.49***	0.01
Conflict engagement	1.58*** <sup>a</sup>	-0.04***	2.09*** <sup>b</sup>	-0.02
Withdrawal	1.47*** <sup>a</sup>	0.00	2.13*** <sup>b</sup>	0.05*

*Note.* Differing superscripts indicate significant differences between the two groups within adolescent-mother or adolescent-father relationships.

\* $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$

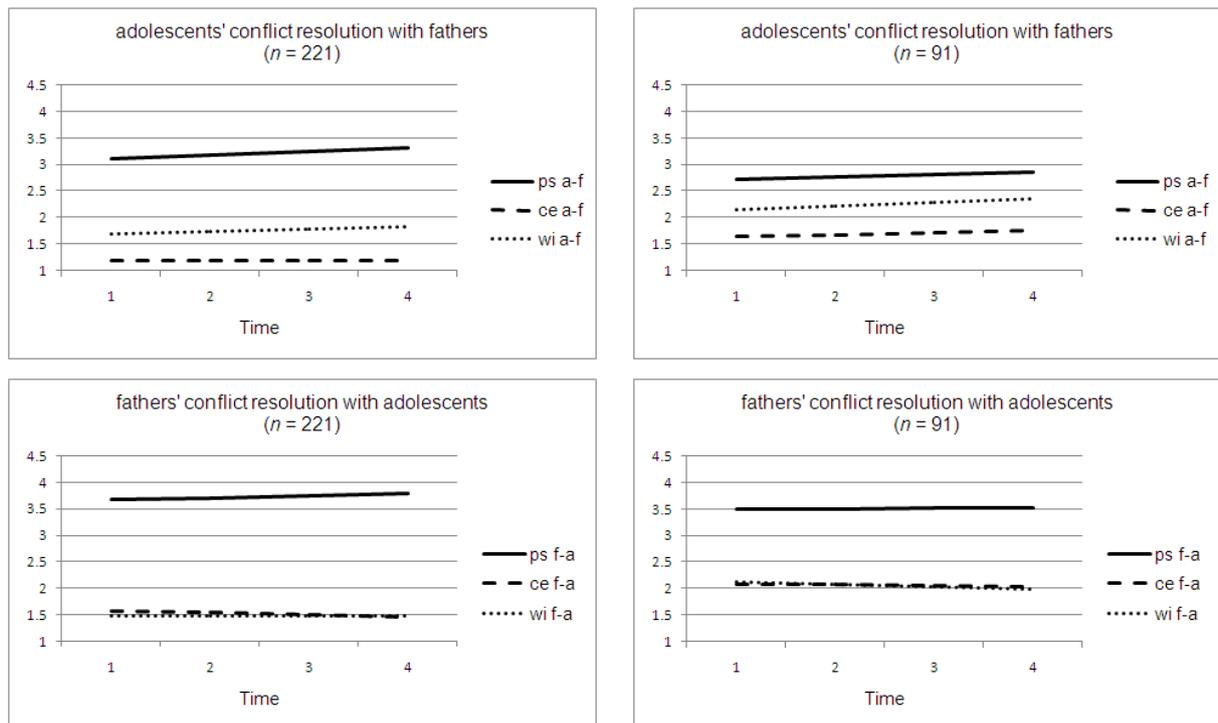


*Figure 3.2.* Conflict Resolution Types in adolescent-mother relationships. ps = positive problem solving, ce = conflict engagement, wi = withdrawal, a-m = adolescents' conflict resolution with mothers, m-a = mothers' conflict resolution with adolescents.

the first group significantly decreased. However, these slopes were not significantly different from the slopes in the second group. Thus, we found differences between the two groups on the intercepts of conflict engagement and withdrawal: One group consisted of fathers and adolescents who used lower levels of conflict engagement and withdrawal than fathers and adolescents in the other group. We also found significant changes in positive problem solving and conflict engagement in the first group, but not in the second. Figure 3.3 shows the changes in conflict resolution styles for these two groups.

### 3.4 Discussion

The purpose of this study was to investigate developmental changes in conflict resolution styles in parent-adolescent relationships and to examine whether groups of parent-adolescent dyads could be distinguished longitudinally based on their configuration of conflict resolution styles. By combining a variable-centered approach and a person-centered approach, we were



*Figure 3.3.* Conflict Resolution Types in adolescent-father relationships. ps = positive problem solving, ce = conflict engagement, wi = withdrawal, a-f = adolescents' conflict resolution with fathers, f-a = fathers' conflict resolution with adolescents.

able to answer questions regarding general processes of change and about different developmental trajectories across groups. More specifically, we were able to investigate both mean level changes of conflict resolution styles in parent-adolescent relationships over time and individual differences in patterns of change over time. A combination of these two approaches is a fruitful way of getting a more complete understanding of the processes and patterns of development (Laursen & Hoff, 2006).

### 3.4.1 Development of Conflict Resolution Styles in Parent-Adolescent Relationships

*Maturation and equality.* In the relationship of adolescents with mothers, we found support for our hypotheses, that is, an increase in positive problem solving, and a temporarily increase in conflict engagement, and withdrawal. Positive problem solving of adolescents with mothers was indeed found to increase from early to middle adolescence. This finding is in agreement with theoretical arguments that more mature ways of conflict resolution develop during adolescence (Sandy & Cochran, 2000; Selman, 1980; Youniss & Smollar, 1985). Furthermore, we found a temporarily increase in conflict engagement and withdrawal in adolescent-mother relationships in early adolescence. More specifically, the curvilinear

pattern showed that these negative styles started to decline around mid-adolescence. In adolescent-father relationships, positive problem solving of adolescents did not change from early to middle adolescence. In addition, we found an increase in withdrawal but no change in the use of conflict engagement with fathers. Our results thus show an increase in positive problem solving and a temporarily increase in conflict engagement and withdrawal of adolescents with mothers. With fathers, we only found an increase in withdrawal. Thus, it seems that - especially in adolescent-mother relationships – adolescents are using more mature ways and less unconstructive ways of handling conflict around mid-adolescence.

*Adolescent-mother and adolescent-father relationships.* Our finding that adolescents tend to increase in the use of positive problem solving with mothers and not with fathers is somewhat in line with the Jensen-Campbell and Graziano study (2000), who found an increase in compromising in daughter-mother relationships only, and not in son-mother and adolescent-father relationships. Although previous research found an increase in aggressive conflict resolution of adolescents with both mothers and fathers (Tucker et al., 2003), we only found a temporarily increase of conflict engagement for the adolescent-mother relationship.

The differences between adolescents' conflict resolution with mothers and fathers, although not consistently found, could be due to the differential roles fathers and mothers play in their adolescents' lives. For example, mothers spend more time in caregiving, joint activities, and conversation with their adolescents than fathers do (Lewis & Lamb, 2003; Youniss & Smollar, 1985), know more about their adolescents' activities than fathers (Waizenhofer, Buchanan, & Jackson-Newsom, 2004), and – presumably as a result – have more conflicts with them than fathers have (Collins & Laursen, 2004; Collins, et al., 1997; Laursen, 1995). Therefore, the development of a new, more mature way of conflict resolution might be necessary at an earlier point in time for adolescent-mother relationships than for adolescent-father relationships.

At the same time, however, adolescent-mother relationships are generally more intense than adolescent-father relationships. As a consequence, the intensity of conflicts with especially mothers might also increase, which might be reflected in the use of a more aggressive conflict resolution style. Future research might examine whether adolescents' positive problem solving and conflict engagement with fathers indeed change later on during adolescence. Another possibility is that the realignment process with fathers is just less turbulent and that there are fewer changes in the way adolescents handle conflicts with their fathers as there are also less conflicts. Generally, our results suggest that adolescents mature in their use of conflict resolution styles with mothers, but not so much with fathers.

We found comparable results for mothers' and fathers' changes in conflict resolution styles with adolescents, except for positive problem solving: Whereas positive problem solving of mothers did not change on average, positive problem solving of father significantly increased. Conflict engagement of mothers and fathers was found to decrease and withdrawal did not change on average. Thus, it seems that not only adolescents mature in their use of conflict resolution styles, but also their parents. As relationship demands change from early to middle adolescence, parents and adolescents tend to change the way they resolve conflicts with each other towards greater equality (Collins, 1990, 1995; Russell et al., 1998; Steinberg, 1990; Youniss & Smollar, 1985).

### ***3.4.2 Reciprocity and Stability within Conflict Resolution Types***

The present study demonstrated different pathways of conflict resolution in parent-adolescent relationships. Supporting stage-environment fit theory (Eccles et al., 1993), we found that for some parent-adolescent dyads the realignment process from an asymmetrical parent-adolescent relationship towards a more egalitarian parent-adolescent relationship might be more stressful than for other dyads. We found two different longitudinal pathways: The first pathway was characterized by higher levels of conflict engagement and withdrawal by both parents and adolescents. The second longitudinal pathway was characterized by lower levels of conflict engagement and withdrawal by both parents and adolescents. In adolescent-mother relationships, these two different pathways were additionally characterized by different levels of positive problem solving of mothers. Our results are in line with coercion theory (Patterson, 1982, 1995) as well as with theories on bidirectionality and interdependency (e.g., Hinde, 1997; Kenny & Cook, 1999; Lollis & Kuczynski, 1997; Minuchin, 1985; Stafford & Bayer, 1993): Higher levels of coercive conflict resolution behavior by parents (i.e., conflict engagement) were found to be accompanied by coercive conflict resolution behavior by adolescents as well.

The two different pathways of parents' and adolescents' conflict resolution styles showed significant differences in the *mean* levels of parents' and adolescents' conflict resolution styles. Moreover, positive problem solving significantly increased in three out of four possible occasions in the positive group and conflict engagement significantly decreased in two out of four possible occasions in the positive group. This is an indication that more realignment occurred in the positive group than in the negative group. However, the slopes of the three conflict resolution styles were not significantly different for the two groups, and thereby we have to be careful in drawing conclusions about differences in development in the

two groups. In general, our findings suggest that all adolescents undergo the same changes, albeit at a different level and from a different starting point. Our results seem to imply that these either positive or negative family systems already existed before our study was conducted and that during the age span of the adolescents in our sample (ages 13 – 16), these developmental pathways were maintained by both parents and adolescents. These results might be interpreted as ongoing reciprocal effects, in which parents and adolescents mutually influence each other. Indeed, problematic parent-adolescent relationships generally have a history of problems during childhood (Holmbeck, 1996). For instance, detrimental parent-child relationships across early and middle childhood were found to increase the risk for negative parent-child interactions in adolescence (Overbeek, Stattin, Vermulst, Ha, & Engels, 2007).

A remarkable result was that – except for positive problem solving of mothers – all differences we found for the different groups of parent-adolescent relationships were on conflict engagement and withdrawal. These results are in line with the ‘bad is stronger than good’ principle (Baumeister, Bratlavsky, Finkenauer, & Vohs, 2001), which states that the negative has more impact on human behavior than the positive. It appears that groups of adolescents and parents can not easily be distinguished by their level of positive problem solving. Instead, it is the absence or presence of co-occurring unconstructive conflict resolution styles that differentiates between negative and positive parent-adolescent relationships.

### ***3.4.3 Strengths and Limitations***

The present study is the first to examine changes in conflict resolution styles in parent-adolescent relationships longitudinally from early to middle adolescence including four measurement points and incorporating independent reports from adolescents and parents. By combining a variable-centered approach and a person-centered approach, we were able to both investigate mean level changes in conflict resolution styles and to focus on the constellation of various conflict resolution styles instead of on isolated conflict resolution styles only. This is important as the use of several conflict resolution styles by the same person has been found to be quite common (Rubenstein & Feldman, 1993). However, our study has also a number of limitations. Firstly, we used adolescents’ and parents’ self-reports to assess conflict resolution styles. More objective data would be obtained when using for instance observations or reports from more than one person. Secondly, although we tapped changes in conflict resolution styles from early to middle adolescence, it would have been

interesting to include conflict resolution styles of adolescents and parents during pre- and late adolescence as well, as our results show that the adolescents' and parents' conflict resolution style pathways were quite stable during the time frame of our study and because it would be interesting to examine whether adolescents' conflict resolution styles with fathers change later on compared to adolescents' change in conflict resolution styles with mothers. Also, participants in our sample were all Dutch adolescents who lived with both parents. Future research should extend our findings to other types of families, for example less well-functioning families. Finally, as previous research found differences in the development of compromising for the daughter-mother, daughter-father, and son-parent dyad (Jensen-Campbell & Graziano, 2000), a potential next step might be to investigate changes in conflict resolution styles for all four dyads separately using a larger sample.

### **3.4.4 Conclusions**

To conclude, our results show that two meaningful longitudinal pathways of conflict resolution in parent-adolescent relationships can be distinguished. Although *generally* adolescents and parents change in their use of conflict resolution styles in a way that indicates maturation and more egalitarianism, these general developments can be differentiated in two groups of adolescents and parents who meaningfully differ in their levels of conflict engagement and withdrawal. Although the slopes of the conflict resolution styles were not significantly different for the two groups, we did find that more realignment occurred in the positive group than in the negative group as indicated by significant increases in positive problem solving and significant decreases in conflict engagement. Taken together, our study shed light on changes in conflict resolution styles in parent-adolescent relationships from early to middle adolescence and shows that – in general – parents and adolescents tend to change the way they handle conflict in line with the demands of a more horizontal relationship. Moreover, we found different groups of parent-adolescent dyads characterized by different levels of unconstructive conflict resolution styles. Finally, we found that these either positive or negative pathways of conflict resolution were maintained by both parents and adolescents, indicating ongoing reciprocal processes in parent-adolescent relationships from early to middle adolescence.

**Longitudinal Transmission of Conflict Resolution Styles from Marital Relationships to Adolescent-Parent Relationships<sup>3</sup>**

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<sup>3</sup> Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (2007). Longitudinal transmission of conflict resolution styles from marital relationships to adolescent-parent relationships. *Journal of Family Psychology, 21*, 426-434.

**Abstract**

This study longitudinally investigates transmission: Can the way adolescents resolve conflicts with their parents be explained by the way parents resolve conflicts with each other? Questionnaires about conflict resolution styles were completed by 282 early adolescents (mean age 13.2) and their parents. Path analyses with crosslagged effects indicated that transmission of conflict resolution styles from marital relationships to adolescent-parent relationships occurs: Conflict engagement and positive problem solving in marital relationships were significantly related to respectively conflict engagement and positive problem solving in adolescent-parent relationships two years later. No significant longitudinal effects emerged with regard to withdrawal. Thus, our study shows that the way marital conflicts are handled affect how adolescents deal with conflicts.

## 4.1 Introduction

Research indicates that marital relationships and parent-child relationships are linked to each other (Cox, Paley, & Harter, 2001; Engfer, 1988; Erel & Burman, 1995). Among the aspects of marital relationships, marital conflict has emerged as particularly significant with regard to its effects on parent-child relationships (Cummings, Goeke-Morey, & Graham, 2002). Findings regarding the effect of marital conflict on parent-child relationships indicate that it is not whether but how parents fight that matters (Cummings et al., 2002; Cummings, Goeke-Morey, & Papp, 2001). It has been suggested that exposure to parents who use constructive conflict resolution styles with each other has a different effect on children than exposure to parents who use hostile, emotionally destructive conflict resolution styles (Davies & Cummings, 1994). In the current study, we will investigate transmission of conflict resolution styles from marital relationships to adolescent-parent relationships over time. More specifically, we will longitudinally investigate whether the way adolescents resolve conflicts with their parents can be explained by the way parents resolve conflicts with each other.

As early adolescence is a time of heightened parent-adolescent conflict (Furman & Buhrmester, 1992; Galambos & Almeida, 1992; Laursen, Coy, & Collins, 1998; Steinberg, 2001) and new ways of handling conflicts might evolve, our research focuses on this age period. Ideally, the renegotiation process starts in early adolescence and parent-adolescent relationships start to become more egalitarian (Russel, Pettit, & Mize, 1998). In this process, more mature ways of conflict resolution between parents and adolescents, characterized by more compromising and perspective taking, should develop. However, as conflict intensity (Laursen, Coy, & Collins, 1998) and disengagement from conflicts (Laursen & Collins, 1994) tend to increase during adolescence, conflict resolution with parents might also be characterized by fighting and arguing or withdrawal. The extent to which adolescents use compromising and perspective taking, fighting and arguing, or withdrawal in conflicts with their parents might depend on the extent to which parents use these conflict resolution styles in their marital relationship. The current study focuses on various conflict resolution styles that adolescents could use in conflicts with their parents, namely positive problem solving, conflict engagement, and withdrawal. Positive problem solving involves trying to understand the others' position and using constructive reasoning tactics to work out compromises. Conflict engagement involves being verbally abusive, angry, defensive or attacking, or losing self-control. Withdrawal involves avoiding the problem, avoiding to talk, and becoming distant.

Different theoretical perspectives suggest a link between marital conflict resolution and adolescents' conflict resolution with their parents. First, according to social learning theory (Bandura, 1977), transmission goes through a process of modeling, in which adolescents observe their parents' attempts to resolve conflicts in the marital relationship and imitate those behaviors in their own conflicts. Second, observing how parents handle conflicts with each other is also likely to influence adolescents' internal working models of relationships (Bowlby, 1969; Fincham, Grych, & Osborne, 1994), which could then have consequences for their own social interactions. Third, family systems theory regards the family as a social system, consisting of several subsystems (e.g. the marital subsystem, the parent-child subsystem). Each subsystem influences and is influenced by other subsystems (Minuchin, 1985). Moreover, according to family systems theory, families are hierarchically arranged, suggesting that parents' behaviors influence adolescents' behaviors more strongly than the reverse (e.g. Erel & Burman, 1995). This suggests that the way parents resolve conflicts with each other influences the way adolescents resolve conflicts with their parents more strongly than the other way around. In sum, different perspectives predict that conflict resolution in marital relationships might influence the way adolescents resolve conflicts with their parents.

Several studies have found a relation between conflict resolution styles utilized in marital relationships and the same conflict resolution styles in parent-adolescent relationships (Noller, Feeney, Sheehan, & Peterson, 2000; Noller, Feeney, Peterson, & Sheehan, 1995; Reese-Weber, 2000; Reese-Weber & Bartle-Haring, 1998; Rinaldi & Howe, 2003). Together, these studies found support for the relation between conflict resolution styles in marital and parent-adolescent relationships for various conflict resolution styles: positive problem solving, conflict engagement, and withdrawal. However, whereas some of these studies only used the adolescents' perception of conflict resolution styles for both marital and parent-adolescent relationships (Reese-Weber, 2000; Reese-Weber & Bartle-Haring, 1998), others only used the perception of the parents (Noller et al., 1995, 2000). Rinaldi and Howe (2003) measured both adolescents' and parents' perceptions of the way parents resolve conflicts with each other and with adolescents, but only found a significant relation between the two subsystems when parents' perceptions were used. Therefore, the abovementioned studies were unable to exclude reporter bias as an explanation for their results. The studies of Noller and colleagues (1995, 2000), however, did also find several significant relations when one parent rated conflict resolution in the marital relationship and the other parent rated conflict resolution in the parent-adolescent relationship, thereby strengthening their findings. In our

study, we will therefore use independent reports for measuring conflict resolution styles in the marital relationship and for measuring conflict resolution styles in the adolescent-parent relationship.

Although the aforementioned studies provide support for the link between conflict resolution styles in marital relationships and parent-adolescent relationships, the cross-sectional results do not allow conclusions regarding transmission over time. Moreover, in these studies parent-adolescent conflict resolution was measured as the combined score of adolescents' conflict resolution with parent and parents' conflict resolution with adolescents. Therefore, the link between conflict resolution styles in marital and parent-adolescent relationships could indicate both an effect on adolescents' conflict resolution styles with parents and an effect on parents' conflict resolution styles with adolescents. We explicitly want to examine whether transmission to adolescents' conflict resolution styles with parents occurs and thus will investigate whether the conflict resolution styles adolescents use over time can be explained by the way parents handle marital conflicts. We will call this transmission, that is the process of transfer of mood, affect, or behavior from one person to another person (Bolger, DeLongis, Kessler, & Wethington, 1989; Larson & Almeida, 1999). Although sometimes this process has been labelled spillover (Erel & Burman, 1995; Larson & Almeida, 1999), according to the original definition, spillover only refers to the direct transfer of mood, affect, or behavior within one person from one setting to another (Bolger et al., 1989; Repetti, 1987), and is therefore more applicable to the link between fathers' conflict resolution styles with mothers and fathers' conflict resolution styles with adolescents as well as mothers' conflict resolution styles with fathers and mothers' conflict resolution styles with adolescents.

However, family systems theory also stresses the mutual influences between family relations. That is, it also highlights the importance of examining how parent-adolescent relationships affect marital relationships (Cox et al., 2001) and suggests the possibility that the way adolescents resolve conflicts with their parents affects the way parents resolve conflicts with each other over time. Although the aforementioned studies, which found a link between marital and parent-adolescent relationships (Noller et al., 1995, 2000; Reese-Weber, 2000; Reese-Weber & Bartle-Haring, 1998; Rinaldi & Howe, 2003) all suggest that marital relationships influence parent-adolescent relationships, due to their cross-sectional design they can not rule out the possibility that parent-adolescent relationships influence marital relationships or that both subsystems influence each other.

In sum, we will longitudinally investigate whether the way adolescents resolve

conflicts with their parents can be explained by the way parents resolve conflicts with each other. Because we use a longitudinal design, we are able to draw conclusions about the direction of effects: Does the way parents resolve conflicts with each other influence the way adolescents resolve conflicts with their parents or vice versa, or do both family subsystems influence each other? We will investigate how positive problem solving, conflict engagement, and withdrawal in marital relationships are related to respectively positive problem solving, conflict engagement, and withdrawal in adolescent-parent relationships two years later. We will use independent perspectives, as marital conflict resolution styles are measured by both fathers' and mothers' perceptions, and adolescent-parent conflict resolution styles are measured by adolescents' perceptions of their conflict resolution styles with both fathers and mothers. We will test whether the conflict resolution styles parents use with each other will be significantly related to the conflict resolution styles adolescents use with their parents over time. Moreover, we will test whether that the path from marital conflict resolution to adolescent-parent conflict resolution will be significantly stronger than the reversed path.

## **4.2 Method**

### **4.2.1 Participants**

Participants in this study came from family sample of the CONAMORE longitudinal study (CONflict And Management Of RElationships; Meeus et al., 2004). In the main study of CONAMORE, 938 early adolescents (mean age 12.4 years, SD = 0.6, ranging from 10-15 years) and 393 middle adolescents (mean age 16.7 years, SD = 0.8, ranging from 16-20 years) from twelve high schools located in the province of Utrecht, The Netherlands, annually filled out a battery of questionnaires at school. At the first measurement, the Dutch early adolescents received a letter including an invitation to participate with both parents during annual home-visits as well. Of the families invited, 491 families initially agreed to participate. Due to our restriction of including only two-parent Dutch families, 90 one-parent families who agreed to participate were not able to take part in this additional research project. Of the remaining 401 families, 323 families were randomly selected to participate from Wave 2 onwards. We refer to this sample as the family sample. Of these 323 families, 320 families participated at Wave 4 (attrition less than 1 %). In our analyses we only used families with complete data on two measurement waves over a two-year time interval, so the final sample consisted of 282 adolescents and their parents. From now on we will refer to Wave 2 as Time 1 and to Wave 4 as Time 2.

Of the adolescents that participated in the family sample, 138 were boys (48.9 %). At the first measurement wave of the family sample, the mean age of the adolescents was 13.2 years (ranging from 11-15 years, SD = 0.5); the mean age of the fathers and mothers was respectively 46.9 years (ranging from 35-65, SD = 5.1) and 44.2 years (ranging from 34-55 years, SD = 4.1). Most adolescents named Dutch as their main ethnic identity (99.3 %) and lived with both parents (98.6 %).

Adolescents were relatively high educated with approximately 50 % of the adolescents at schools preparing for university, 35 % of the adolescents at schools preparing for higher education and 15 % of the adolescents at schools preparing for blue-collar work (because some classes are combination classes of different school levels, exact numbers cannot be provided). The educational level of the fathers and mothers could be differentiated as 27.3 % and 32.0 % low-middle, and 72.7 % and 68.0 % high, respectively.

Analyses were performed to test whether there were differences between the adolescents who participated in the family sample and those who did not. When selecting the comparison group, we controlled for the fact that only adolescents from intact Dutch families were invited to take part in the family sample. A MANOVA showed no differences between participants in the family sample and nonparticipants on age, gender, and adolescents' conflict resolution styles with fathers and mothers at wave 2:  $F(8, 634) = 2.20, p > .01$ .

#### **4.2.2 Procedure**

Before the study, both adolescents and their parents received written information and, if the adolescent wished to participate, were required to provide written informed consent. Interviewers visited the schools and asked participating adolescents to gather in classrooms to fill out a questionnaire. Interviewers also visited the families at home. During these home visits, adolescents filled out an additional questionnaire and both parents also filled out a questionnaire. The adolescents and their parents were instructed to fill out the questionnaire independent from each other. Results were processed anonymously. Each wave, families received € 27, - for participating and adolescents received an additional amount of € 10, - for participating at school.

#### **4.2.3 Measures**

*Conflict resolution styles.* Conflict resolution styles were measured by Kurdek's Conflict Resolution Style Inventory (CRSI; Kurdek, 1994). The scores on three conflict resolution styles were used for this study: conflict engagement, positive problem solving, and

withdrawal. Fathers and mothers rated the conflict resolution styles they used in conflicts with each other at both measurement waves. Adolescents rated the conflict resolution styles they used in conflicts with both fathers and mothers, also at both measurement waves. Each style was measured by five items and these items were rated on a 5-point Likert scale ranging from never to always. Conflict engagement was measured by items such as: ‘getting furious and losing my temper’, and ‘letting myself go and saying things I do not really mean’. Positive problem solving involved making compromises (e.g., ‘negotiating and trying to find a solution that is mutually acceptable’), and discussing the conflict effectively (e.g., ‘sitting down and discussing the differences of opinion’). Items used to measure withdrawal were for example: ‘not listening anymore’, ‘refusing to talk any longer’, and ‘withdrawing from the situation’.

Factor analyses showed the expected three-factor structure with all loadings  $> .36$ , both for marital and adolescent-parent conflict resolution styles. With regard to the marital relationship, this factor structure has also been found by Kurdek (1994). The temporal stability of the conflict resolution styles in the marital and adolescent-parent relationship was moderately high, ranging from .48 to .72 (see Table 4.1). The stability coefficients that were found in the marital relationship are comparable to previous findings (Kurdek, 1994), although there the 1-year stability was computed. Cronbach’s alphas ranged from .85 to .94, .76 to .84, and .78 to .86 for adolescents’ conflict resolution with parents on positive problem solving, conflict engagement and withdrawal, respectively. For fathers’ and mothers’ conflict resolution styles with each other, Cronbach’s alphas ranged from .85 to .88, .74 to .79, and .81 to .83 on positive problem solving, conflict engagement and withdrawal, respectively.

### 4.3 Results

To answer our research question, we performed path analyses with cross-lagged effects for each conflict resolution style separately by means of structural equation modeling using AMOS (Arbuckle, 2003). A latent model was constructed for each conflict resolution style separately (i.e. positive problem solving, conflict engagement, and withdrawal). Conflict resolution in marital relationships was measured as a latent variable with fathers’ conflict resolution style with mothers and mothers’ conflict resolution style with fathers as indicators. To ensure the same influence of fathers’ and mothers’ style on the construct, all factor loadings were fixed to 1. Conflict resolution of adolescents with parents was measured as a latent construct with adolescents’ conflict resolution style with mothers and fathers as

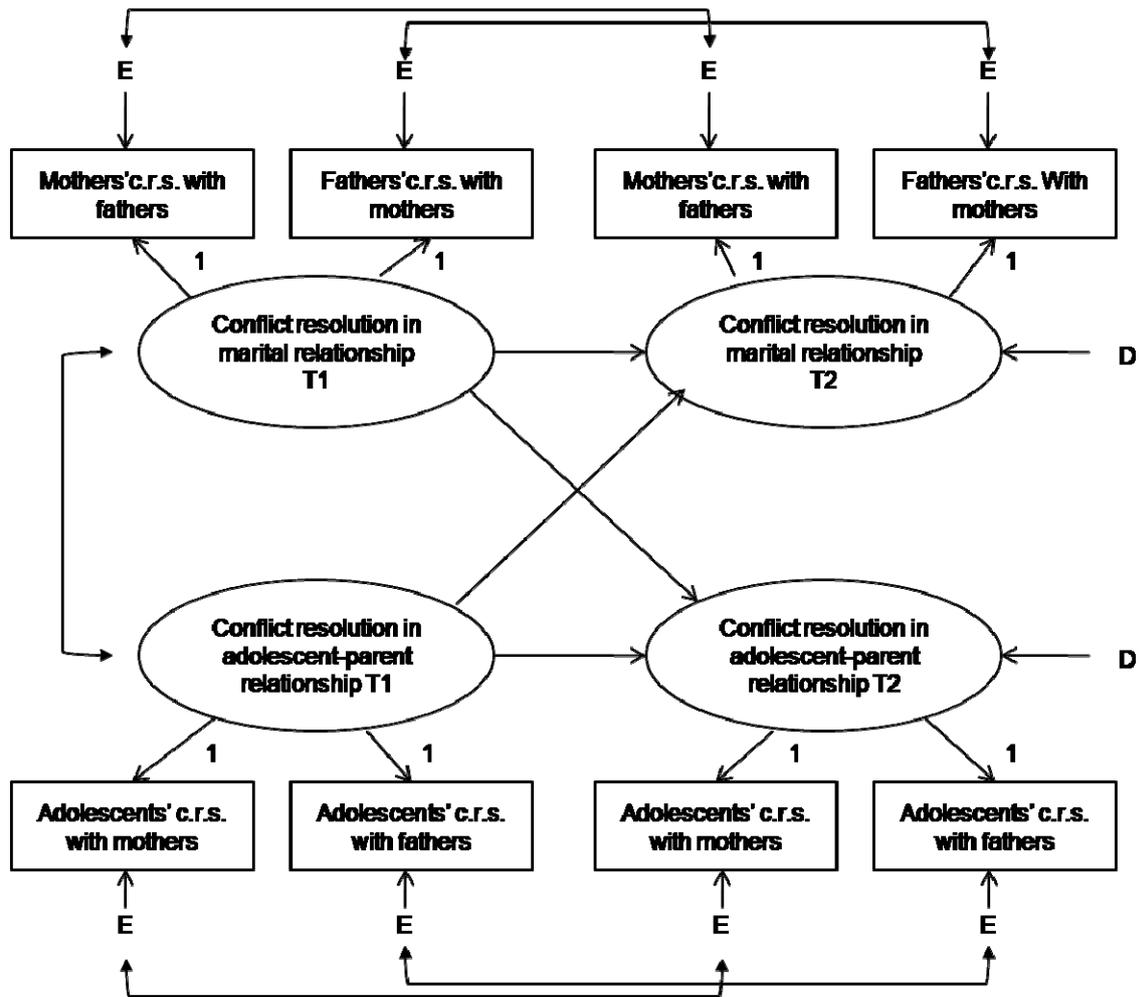


Figure 4.1. Model estimated to assess the longitudinal association between conflict resolution styles in marital and adolescent-parent relationships. E = measurement error, D = disturbance, c.r.s = conflict resolution style.

indicators. Again, all factor loadings were fixed to 1, to ensure equal importance of the conflict resolution style in adolescent-father and adolescent-mother relationships.

Corresponding measurement errors of each observed variable at Time 1 and Time 2 were allowed to correlate across the two time points. For example, the error of mothers' conflict resolution style with fathers at Time 1 was allowed to correlate with the error of mothers' conflict resolution style with fathers at Time 2. In Figure 4.1 the conceptual model is shown.

The correlations between the indicators of marital and adolescent-parent relationships at each measurement wave are presented in Table 4.1.

To evaluate the fit of each model, we used the Goodness-of-Fit Index (GFI), the Non-Normed Fit Index (NNFI), and the Root Mean Square Error of Approximation (RMSEA). For values of GFI and NNFI, values above .90 indicate acceptable fit and values above .95 indicate good fit (Hu & Bentler, 1999). RMSEA values up to .06 represent a close fit of the model. The coefficients in the figures are standardized estimates.

Figure 4.2 represents the maximum likelihood results of the model for positive problem solving. This model provided a good fit to the data. Compared to a model without the cross-lagged paths, this model provided a significantly better fit ( $\Delta\chi^2(2) = 10.06, p < .05$ ). The results of this model showed a very high stability of positive problem solving in marital relationships over the two measurement waves ( $\beta = .96, p < .01$ ). The stability of positive problem solving in adolescent-parent relationships was moderately high ( $\beta = .53, p < .01$ ). At Time 1, a significant relation was found between positive problem solving in marital relationships and positive problem solving in adolescent-parent relationships ( $r = .25, p < .05$ ). Moreover, positive problem solving in marital relationships was significantly related to positive problem solving in adolescent-parent relationships two years later ( $\beta = .24, p < .01$ ). The path from positive problem solving in adolescent-parent relationships to positive problem solving in marital relationships was not significant ( $\beta = -.05, ns$ ). Critical ratio comparisons of these coefficients showed that the path from marital to adolescent-parent relationships was significantly stronger than the reversed path ( $CR = -2.900, p < .01$ , one-tailed). Thus, positive problem solving of adolescents with parents can be explained over time by the use of positive problem solving by parents in conflicts with each other.

The results for the relation between conflict engagement in marital relationships and adolescent-parent relationships are shown in Figure 4.3. When testing this model, a negative disturbance term for marital conflict engagement appeared. Since this value is not possible, we decided to set this value to .01. This model provided a good fit to the data. Compared to a model without the cross-lagged paths, this model provided a significantly better fit ( $\Delta\chi^2(2) = 6.694, p < .01$ ). Again, the results of this model showed a high stability of the conflict resolution style used in marital relationships over the two measurement points ( $\beta = .95, p < .01$ ). The stability of conflict engagement in adolescent-parent relationships was moderately high ( $\beta = .61, p < .01$ ). At Time 1, no significant relation was found between conflict engagement in marital relationships and conflict engagement in adolescent-parent relationships ( $r = .15, ns$ ). However, conflict engagement in marital relationships was significantly related to conflict engagement in adolescent-parent relationships two years later ( $\beta = .17, p < .05$ ). The reversed path, from adolescent-parent conflict engagement to marital

Table 4.1

*Correlations among Indicators of Conflict Resolution Styles in Marital Relationships and Adolescent-Parent Relationships at Time 1 and Time 2.*

<i>Positive problem solving</i>	1	2	3	4	5	6	7	8
1. Mothers with fathers T 1	-							
2. Fathers with mothers T 1	.24**	-						
3. Adolescents with mothers T 1	.15*	.10	-					
4. Adolescents with fathers T 1	.07	.11	.76**	-				
5. Mothers with fathers T 2	.64**	.34**	.12*	.12*	-			
6. Fathers with mothers T 2	.20**	.64**	.08	.08	.32**	-		
7. Adolescents with mothers T 2	.17*	.17**	.54**	.46**	.14*	.16**	-	
8. Adolescents with fathers T 2	.20**	.22**	.44**	.48**	.16**	.22**	.75**	-
<i>Conflict engagement</i>								
1. Mothers with fathers T 1	-							
2. Fathers with mothers T 1	.29**	-						
3. Adolescents with mothers T 1	.11	.06	-					
4. Adolescents with fathers T 1	.11	.05	.81**	-				
5. Mothers with fathers T 2	.68**	.27**	.08	.02	-			
6. Fathers with mothers T 2	.36**	.72**	.02	.05	.29**	-		
7. Adolescents with mothers T 2	.13*	.13*	.59**	.54**	.14*	.13*	-	
8. Adolescents with fathers T 2	.07	.12*	.44**	.50**	.08	.09	.74**	-
<i>Withdrawal</i>								
1. Mothers with fathers T 1	-							
2. Fathers with mothers T 1	.30**	-						
3. Adolescents with mothers T 1	.19**	.11	-					
4. Adolescents with fathers T 1	.15**	.10	.78**	-				
5. Mothers with fathers T 2	.60**	.29**	.23**	.16**	-			
6. Fathers with mothers T 2	.23**	.63**	.04	.05	.36**	-		
7. Adolescents with mothers T 2	.15*	.05	.52**	.54**	.19**	.04	-	
8. Adolescents with fathers T 2	.19**	.09	.48**	.59**	.24**	.07	.74**	-

*Note.* T = Time

\* $p < .05$ ; \*\* $p < .01$ .

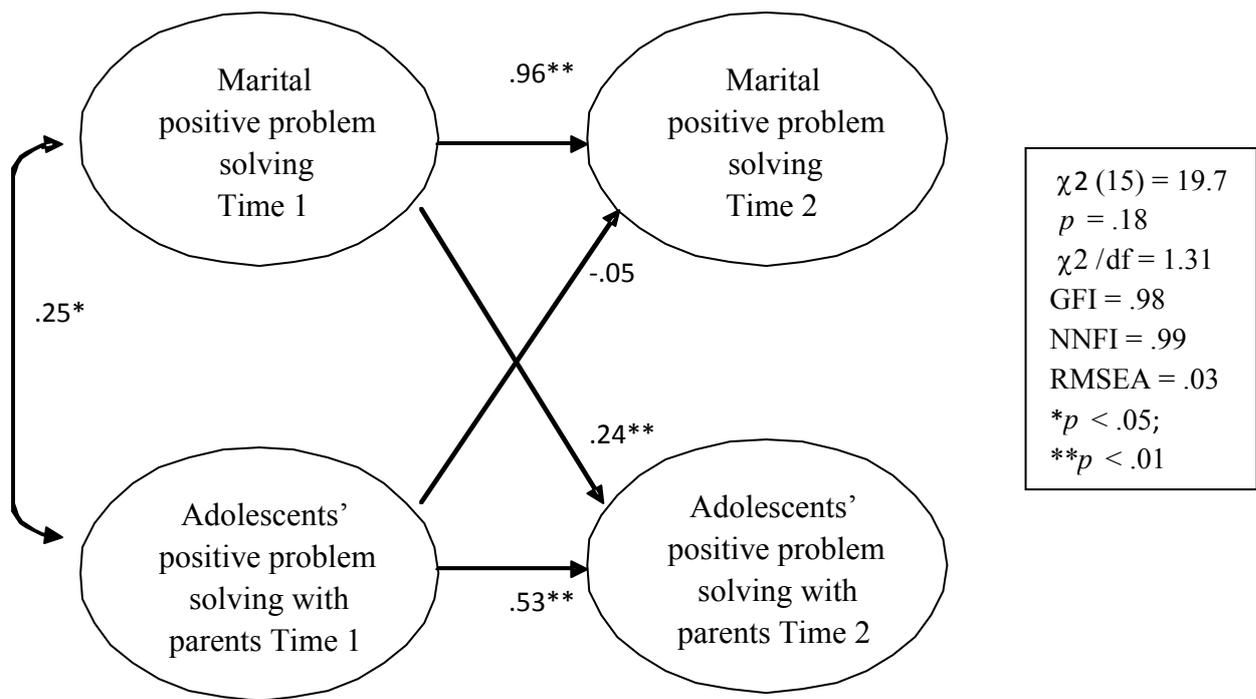


Figure 4.2. Relation between positive problem solving in marital and adolescent-parent relationships.

conflict engagement, was not significant ( $\beta = -.07, ns$ ). Furthermore, critical ratio comparisons of these coefficients indicated that the path from marital to adolescent-parent relationships was significantly stronger than the reversed path ( $CR = -2.465, p < .01$ , one-tailed).

Figure 4.4 shows the results of the model for withdrawal. As with the other two models, this model provided a good fit to the data. However, compared to a model without the cross-lagged paths, this model did not provide a significantly better fit ( $\Delta\chi^2(2) = 1.409, p > .05$ ). Nevertheless, in order to be able to compare the different conflict resolution styles, we report the results of the model with the cross-lagged paths. Stability of withdrawal in marital and adolescent-parent relationships was respectively very high and moderately high ( $\beta = .81, p < .01$  and  $\beta = .64, p < .01$ ). The relation between withdrawal in marital relationships and adolescent-parent relationships was significant at Time 1 ( $r = .28, p < .01$ ). However, withdrawal in marital relationships was not significantly related to withdrawal in adolescent-parent relationships two years later ( $\beta = .09, ns$ ). The relation between withdrawal in adolescent-parent relationships and withdrawal in marital relationships two years later was also not significant ( $\beta = .00, ns$ ).

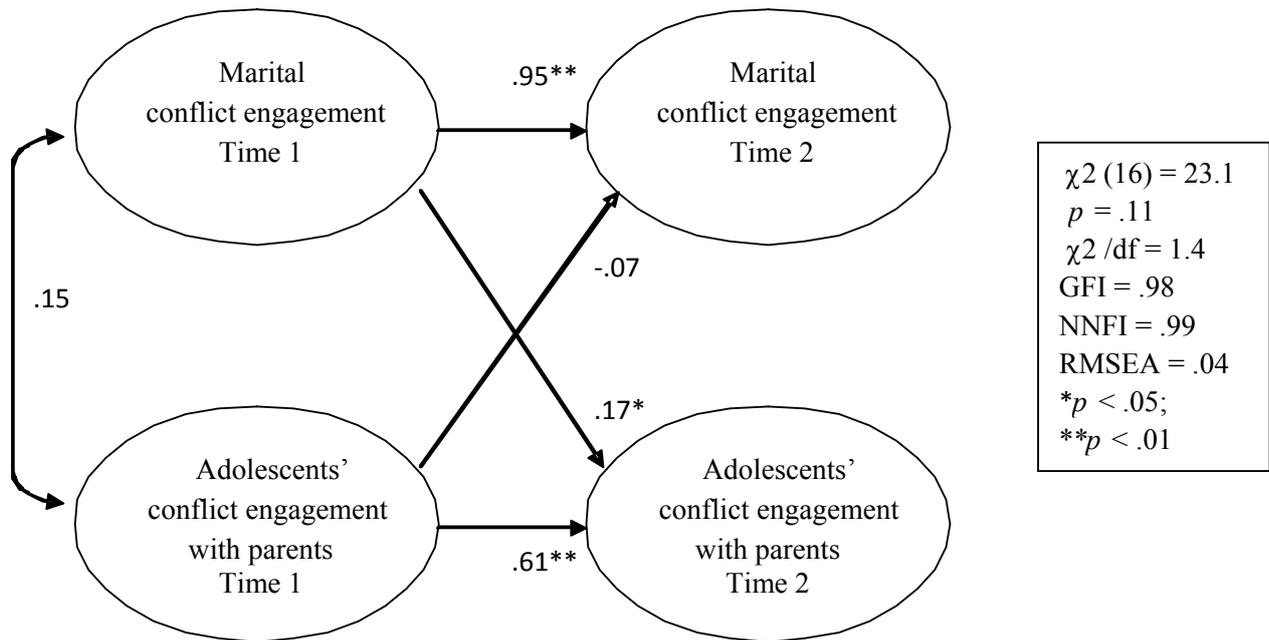


Figure 4.3. Relation between conflict engagement in marital and adolescent-parent relationships.

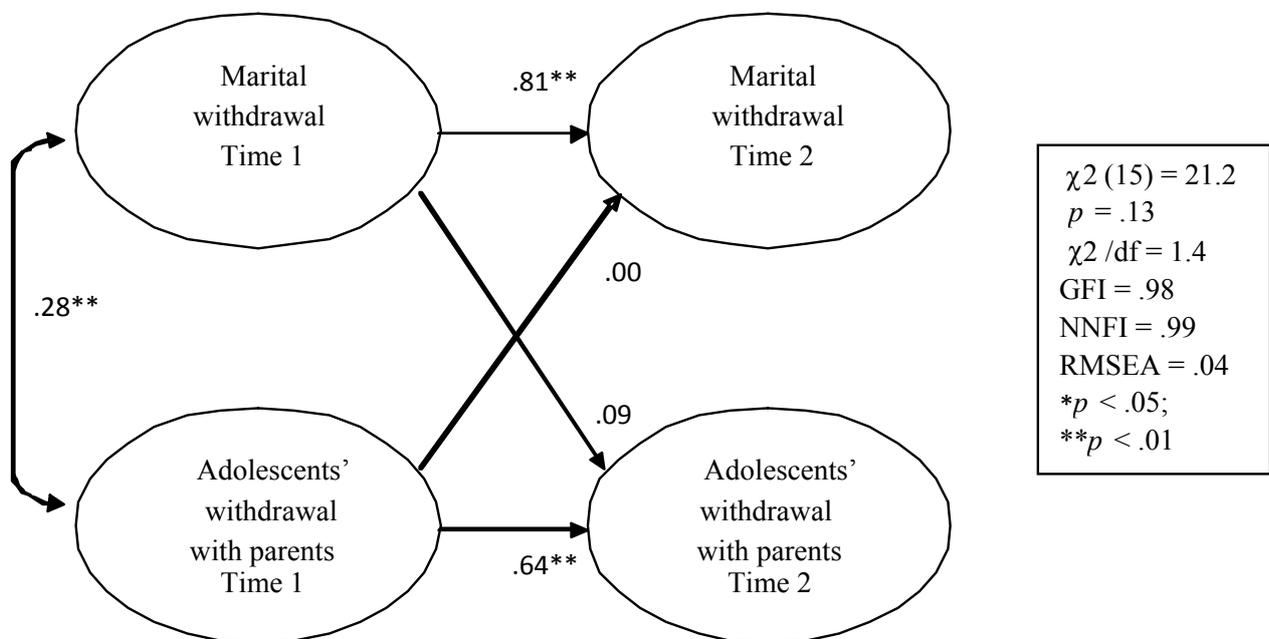


Figure 4.4. Relation between withdrawal in marital and adolescent-parent relationships.

#### 4.4 Discussion

The purpose of the present study was to investigate whether the way adolescents resolve conflicts with their parents could be explained by the way parents resolve conflicts with each other, or in other words, whether transmission of conflict resolution styles from marital to adolescent-parent relationships occurred. The results clearly show that the use of positive problem solving and conflict engagement by adolescents in parent-adolescent relationships can be explained longitudinally by the use of respectively positive problem solving and conflict engagement in marital relationships. Although it has been suggested that the negative always has more impact on human behavior than the positive (Baumeister, Bratlavsky, Finkenauer, & Vohs, 2001), we found that transmission occurred for both positive and negative conflict resolution.

To our knowledge, this is the first study that examined the relation between marital conflict resolution styles and adolescent-parent conflict resolution styles longitudinally. Our study found support for the notion that conflict resolution styles in marital relationships influence adolescents' conflict resolution styles with parents over time after controlling for concurrent relations between conflict resolution styles in marital relationships and adolescent-parent relationships. By focusing on adolescents' own conflict resolution styles in relationships with parents, our results allow to conclude that the effects found from marital relationships to adolescents' relationships with parents over time are transmission effects from parents to adolescents and not spillover effects of parents from one relational context to another. The use of independent reports for marital conflict resolution and adolescent conflict resolution further strengthens this conclusion and ensures that reporter bias could not explain the relation we found.

Our results might be explained by family systems theory, which indicates that subsystems within the family are hierarchically arranged, with the largest influence of the marital relationship. Our finding that marital conflict resolution styles influence adolescent-parent conflict resolution styles more strongly than the other way around is in line with this hierarchical organization. However, family systems theory also emphasizes the importance of bidirectionality, and therefore the idea that adolescents' conflict resolution styles with parents might also influence the way parents resolve conflicts with each other (Cox et al., 2001). However, when it comes to conflict resolution styles, we found no indication for bidirectionality between the marital and adolescent-parent subsystem. The consequences of marital conflict for children's and adolescents' adjustment have been extensively examined

(for reviews, see Davies & Cummings, 1994; Grych & Fincham, 1990; Zimet & Jacob, 2002). Our research extends these results, in that we found that conflict resolution styles in marital relationships also have consequences for the way adolescents handle conflicts with their parents over time. An alternative explanation for our findings may be that the effects we found are, at least to some extent, developmental in nature. It is possible that the genetic resemblance to parents becomes apparent in adolescence (e.g. Plomin et al., 1993).

Although we distinguished transmission from spillover effects, spillover effects might still play a role in explaining the transmission of conflict resolution styles from marital to adolescent-parent relationships, albeit in a more indirect way. The fact that marital conflict spills over to parents' behavior in the parent-child relationship has been widely acknowledged (Erel & Burman, 1995; Krishnakumar & Buehler, 2000). In our study, it is possible that when parents use a certain resolution style with each other during conflicts, this might spill over to conflict resolution styles fathers and mothers use during conflicts with their adolescents. As a consequence, adolescents might reciprocate that same resolution style. Thus, although we distinguished the conflict resolution styles of adolescents and parents, the conflict resolution styles parents use in conflicts with their adolescents might still mediate the relation we found between conflict resolution styles in marital relationships and adolescent-parent relationships.

No significant result emerged for the conflict resolution style characterized by withdrawal. Although two studies (Reese-Weber & Bartle-Haring, 1998; Rinaldi & Howe, 2003) found a significant relation between withdrawal in marital and parent-adolescent relationships, we only found this relation concurrently and were unable to find this relation longitudinally. An explanation for this nonsignificant result regarding transmission of withdrawal might be that withdrawal in the marital relationship is less visible for adolescents than the other conflict resolution styles and thus it is less likely that adolescents imitate this style or construct internal working models of this style. Withdrawal might also conceal the underlying conflict. For adolescents, it might appear as if their parents have no conflicts and thus it is also less probable that this conflict resolution style will be transmitted to adolescent-parent relationships. Results of a meta-analysis by Krishnakumar and Buehler (2000) indicate that the spillover effect from marital conflict to parenting behaviors was the strongest for overt conflict between parents. This suggests that more covert conflict resolution styles by parents, like withdrawal, might affect parent-adolescent relationships less strongly. The same might be true for transmission of covert conflict resolution styles.

Although our study provides interesting findings regarding the transmission of conflict resolution styles between family subsystems, it also has a number of limitations. First, we

used self-reports only to assess conflict resolution styles. More objective data would be obtained when using for instance observations or reports from more than one person. Second, by focusing on multiple conflict resolution styles at the same time we were unable to examine whether transmission occurs of conflict resolution styles that were predominantly used. However, research on adolescents' conflicts with parents found that the use of several conflict resolution styles by the same person is quite common (Rubenstein & Feldman, 1993). Third, future research should extend our findings to other types of families, for example less well-functioning families, and on transmission of conflict resolution styles to other family subsystems, for example sibling relationships. There is an indication that transmission from parent-adolescent to sibling relationships might occur, for these family subsystems have been found to be related (Noller et al., 1995, 2000; Reese-Weber, 2000; Rinaldi & Howe, 2003). Fourth, future research might differentiate transmission of conflict resolution styles for the four dyads, that is, the daughter-mother, daughter-father, son-mother, and son-father dyad. Finally, it might be interesting to investigate the moderating role of both marital and parent-adolescent conflict on the transmission process.

To conclude, the current study clearly shows that the way adolescents resolve conflicts with parents can be explained longitudinally by the way parents resolve conflicts with each other. When parents use more positive problem solving during marital conflicts, adolescents will also use this style more when facing conflicts with parents. On the other hand, when parents use more conflict engagement during marital conflicts, they will also encounter conflict engagement by their adolescents in their conflicts. So, for parents, it is an important lesson to handle conflicts better for the sake of their children and for themselves. Moreover, by focusing on adolescent conflict resolution styles in parent-adolescent relationships, we were able to provide a more accurate picture of how marital and parent-adolescent relationships are related. This increases our knowledge about the mechanism behind the relation of conflict resolution styles between family subsystems.

**Intraindividual Variability in Adolescents' Perceived Relationship Satisfaction: The Role of Daily Conflict<sup>4</sup>**

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<sup>4</sup> Van Doorn, M. D., Branje, S. J. T., Hox, J. J., & Meeus, W. H. J. (in press). Intraindividual variability in adolescents' perceived relationship satisfaction: the role of daily conflict. *Journal of Youth and Adolescence*.

### **Abstract**

A daily diary method was used to examine the daily dynamics of adolescent conflict and perceived relationship satisfaction with mothers, fathers, and best friends among a sample of 72 Dutch adolescents ( $M = 15.59$  years). Multilevel analyses revealed that perceived relationship satisfaction with mothers, fathers, and best friends was lower on days on which conflict occurred with mothers, fathers, and best friends than on days on which no conflict occurred. More specifically, perceived relationship satisfaction was highest in a particular relationship on days when no conflict occurred, second highest on days on which constructive conflict occurred, and lowest on days on which unconstructive conflict occurred. Whereas in adolescents' relationships with their parents, conflict and perceived relationship satisfaction were not found to be related to each other one day later, conflict with their best friends – and especially unconstructive conflict – was found to be related to higher perceived relationship satisfaction one day later.

## 5.1 Introduction

Adolescents' dyadic relationships are largely based on the interactions that occur over time between adolescents and their relationship partners. Although not all interactions may have an impact on the relationship, some salient interactions such as conflict may temporarily or permanently affect their relationships, and may improve or worsen them (Kelley et al., 1983). Although the dynamic nature of relationships is widely recognized, most studies assess relationship quality as a relatively static concept and only examine changes over an extended period of time, thereby ignoring daily fluctuations in relationship quality. The current study examines how adolescents navigate through the ups and downs of daily interactions with their parents and best friends by focussing on the consequences of daily conflict for perceived relationship satisfaction. By means of a diary study, we will investigate whether *daily* conflict and *daily* perceived relationship satisfaction are related to each other and, more specifically, how different ways of handling conflict are related to perceived relationship satisfaction.

Daily conflict might be different in adolescents' relationships with parents and best friends. According to the social relational model (Laursen & Collins, 1994; Laursen, Hartup, & Koplas, 1996), two dimensions that distinguish relationships are closeness and openness. Relationships with parents and friends are both characterized by the highest level of closeness and interdependence, but they differ in openness (Laursen, 1996). Openness may be regarded as the ease with which a relationship can be dissolved. Parent-adolescent relationships are *closed* or *involuntary* relationships as they are constrained by kinship, norms, and law and they are not easily dissolved. In these relationships, power is often unequally divided. In contrast, relationships with friends are *open* relationships: They are voluntary and they are formed and dissolved more regularly (Laursen & Collins, 1994). These relationships are also more egalitarian. The difference in the voluntary nature of these relationships might affect conflict interactions within these relationships.

The way adolescents handle conflict with their parents and friends differs in a way consistent with the social relational model (Laursen & Collins, 1994; Laursen et al., 1996). According to this model, conflict behavior varies as a function of the relationship in which conflict arises. With friends, adolescents are aware of the fact that conflict poses threats to the maintenance of their relationships (Hartup, 1992). Therefore, adolescents will try to avoid conflict and when conflicts do occur, they tend to avoid expressions of anger and tend to compromise more in order to maintain the friendship (Collins & Steinberg, 2006). In contrast, during conflict with their parents, adolescents will be less precautious for these relationships

are more likely to endure (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997). Indeed, adolescents report that they have *more* conflicts with their parents than with their friends (Adams & Laursen, 2001; Furman & Buhrmester, 1992; Jensen-Campbell & Graziano, 2000). Also, whereas conflict with friends has been found to decline during adolescence (Collins & Laursen, 1992), conflict with parents temporarily increases during early adolescence (for a review, see Collins & Steinberg, 2006; De Goede, Branje, & Meeus, 2008; McGue, Elkins, Walden, & Iacona, 2005), even though most parent-adolescent relationships remain close (Holmbeck, 1996; Smetana, Campione-Barr, & Metzger, 2006). In line with the social relational model, a meta-analysis on conflict management with close peers (defined as friends and romantic partners) and parents (Laursen, 1993a) showed that adolescents used more negotiation with close peers than either disengagement (characterized by withdrawal or stand-off) and power assertion (defined as demanding behavior until the other person submits). During conflict with parents, power assertion appeared as the dominant resolution, and negotiation was least often used. Relative to close peers, adolescents reported less negotiation with parents (Laursen, 1993a). A meta-analysis on peer conflict resolution showed similar results (Laursen, Finkelstein, & Townsend-Betts, 2001). In contrast, a diary study on the differences between conflict with parents and friends found no significant differences in the use of negotiation during conflict with parents and friends and also showed that adolescents used more verbal insults with friends than with parents (Jensen-Campbell & Graziano, 2000). In sum, adolescents' conflict behavior varies as a function of the relationship in which it occurs.

The impact of daily conflict on adolescent relationships with their parents and best friends might also differ in a way consistent with the social relational model. Adolescents seem to discriminate in the way they report about the impact of conflict on relationships. Whereas conflict with close friends has been found to improve more often than worsen relationships, the opposite was true for conflict with parents. More specifically, for most daily conflicts with parents and close friends, adolescents reported that they expect these conflicts to have no long-term effect on their relationship. However, for a substantial part of their daily conflicts with close friends (23% of the conflicts), adolescents reported that they expect these conflicts to even improve their relationship, whereas with parents this was to a much lesser extent the case (about 10% of the conflicts). There were no differences between adolescents' relationships with parents and close friends in the proportion of conflict that made the relationship worse, which was the case for approximately 15% of the conflicts (Laursen, 1993b).

The associations of daily conflict with relationship satisfaction might depend on the conditions under which conflict takes place (Holmbeck, 1996). Research on the consequences or correlates of parent-adolescent conflict showed that conflicts might have different consequences, depending on the conflict behaviors applied during those conflicts. In addition, adolescents' feelings of closeness tend to fluctuate more and seem to be more dependent on the situation (Larson & Richards, 1994). For example, the use of a conflict resolution style characterized by aggressive, demanding, or impulsive behavior has been found to be related to lower relational satisfaction (Caughlin & Malis, 2004a). In contrast, open communication between adolescents and their parents has been found to be related to higher levels of satisfaction with the family (Jackson, Bijstra, Oostra, & Bosma, 1998). Certain conflict behaviors with friends have also been found to be related to negative outcomes. Negative engagement (physical and verbal aggressive behavior) during conflict with friends has been found to be related to lower relationship satisfaction in adolescent boys (Dishion, Andrews, & Crosby, 1995). However, the same study did not find positive engagement (positive nonverbal behavior such as touching, holding and physical interactions and positive verbal behavior such as self-disclosure) during conflict with friends to be related to higher relationship satisfaction. Thus, in general, whereas negative conflict behaviors have been found to be related to lower levels of relationship satisfaction, positive conflict behaviors have been found to be related to higher levels of relationship satisfaction.

In this study we will address five research questions. First, we will investigate the associations between conflict and perceived relationship satisfaction at the individual level: How are conflict and perceived relationship satisfaction related to one another? We hypothesize that adolescents who generally have more conflicts with their parents and best friends during the week will also generally be less satisfied with these relationships. Subsequently, we will examine whether conflict and perceived relationship satisfaction are related to one another *within* individual adolescents at a daily-level: How is conflict on one day related to perceived relationship satisfaction on the same day in a particular relationship? We hypothesize that perceived relationship satisfaction is lower on days on which conflict occurred than on days on which no conflict occurred, for the relationship with both parents and best friends. After examining how conflict on one day is related to perceived relationship satisfaction *on the same day*, we will investigate how conflict on one day is related to perceived relationship satisfaction *one day later*. In other words, is there a lagged effect of conflict on perceived relationship satisfaction? As adolescents prospectively indicate that

most conflicts with parents have no impact on their relationship (Laursen, 1993a, 1993b), we will explore whether the negative relationship between conflict with parents and perceived relationship satisfaction will disappear one day later. Although adolescents prospectively indicate that they expect a certain amount of conflict with friends to improve their relationship (Laursen, 1993a, 1993b), it remains unknown whether this relationship can be more objectively established during a one-week period. Instead of asking adolescents to indicate their expectations regarding the long-term influence of conflict, we will investigate the relationship between the occurrence of conflict on one day and perceived relationship satisfaction one day later. We will explore whether conflict with friends will be related to higher perceived relationship satisfaction one day later.

Finally, we will examine how constructively handled conflict and unconstructively handled conflict with parents and best friends are related to perceived relationship satisfaction within individual adolescents at a daily level. In the current study positively handled conflict was measured by the extent to which negotiation and compromising was used by adolescents. Negatively handled conflict involved adolescents' use of either an aggressive conflict resolution style (labelled conflict engagement) or a conflict resolution style characterized by withdrawal. Based on previous research, we expect perceived relationship satisfaction to be lower on days on which either constructively or unconstructively handled conflict occurred than on days on which no conflict took place. Moreover, we hypothesize perceived relationship satisfaction to be lower on days on which unconstructively handled conflict took place than on days on which constructively handled conflict took place. We will also investigate how different ways of handling conflict are related to perceived relationship satisfaction one day later. In other words, is there a lagged effect of conflict type? Although adolescents reported most conflicts to have no effect on perceived relationship satisfaction, they reported some conflicts to improve the relationship and other conflicts to worsen the relationship. We will explore whether a negative lagged effect of conflict with parents and friends will appear for unconstructively handled conflict, and whether a positive lagged effect will appear for constructively handled conflict. All the analyses were carried out for the adolescent-mother, adolescent-father, and adolescent-best friend relationship separately. The focus of the current study will be only on the first nominated best friend, since previous research has shown that this dyadic relationship is much stronger than other types of friendship (i.e., other close friends, such as the second or third nominated friends) (Degirmencioglu, Urberg, Tolson, & Richard, 1998; Newcomb & Bagwell, 1995). Also, the

stability of first nominated best friendships is much higher compared to other friendships (Berndt & Keefe, 1995).

## 5.2 Method

### 5.2.1 Participants

The current study uses data from 72 adolescents (40 girls; 55.6%), whose age ranged from 14 to 16 years old ( $M = 15.59$ ,  $SD = 0.46$ ). Adolescents named Dutch as their main identity and lived with both parents. Different levels of education were represented in the current study, with 53.5% of the adolescents at schools preparing for university, 34% of the adolescents at schools preparing for higher professional education and 12.5% of the adolescents at schools preparing for lower-level jobs. The adolescents that participated in the diary study were a subsample of the CONAMORE 5-wave longitudinal study (CONflict And Management Of RElationships; author reference). The diary study was conducted approximately six months after the fourth annual wave of the main study. In the main study of CONAMORE, 923 early adolescents ( $M = 12.4$ ,  $SD = 0.6$ ) and 390 middle adolescents ( $M = 16.7$  years,  $SD = 0.8$ ) from twelve high schools located in the province of Utrecht, The Netherlands, annually filled out a battery of questionnaires at school. Sample attrition was 1.6% up to the fourth wave: the number of participants in Wave 1, 2, 3, and 4 was 1313, 1313, 1293, and 1292, respectively. We selected participants for the current study from the 648 early adolescents who participated in Wave 4, has the Dutch nationality and lived with both parents. Of these 648 early adolescents, 323 adolescents already had participated in another additional study and therefore they were not considered for participation.

The sample of which the participants were drawn from consequently consisted of 325 adolescents. Since the number of conflicts was found to be low in our sample, which is in line with the fact that it was drawn from a nonclinical population, we decided to use a selection approach in order to increase variance in conflict frequency in the diary study. More specifically, we made sure that about half of the adolescents invited to participate in our study had a score above the 75<sup>th</sup> percentile of conflict frequency on at least one of three relationships (mother, father, best friend) assessed in Wave 4 of the main study and thus was drawn from the “high conflict” sample ( $n = 139$ ). The other half of the adolescents was randomly selected from the adolescents who scored below the 75<sup>th</sup> percentile on this measure at Wave 4 and thus was drawn from the “control” sample ( $n = 186$ ). The 75<sup>th</sup> percentile of

conflict frequency with mothers, fathers, and best friends was computed for adolescent boys and girls separately.

Our goal was to gather diary data from about 80 adolescents. Taking nonresponse into account, we invited 113 adolescents to participate. Of the initially 113 invited adolescents, 90 agreed to participate in our study, and 72 adolescents actually returned the diary. Of the “conflict participants”, 35 out of 58 invited adolescents (60%) actually returned the diary. Of the “control participants”, 37 out of 55 invited adolescents (67%) actually returned the diary. A MANOVA showed no differences in adolescents’ relationship satisfaction with their mothers, fathers, and best friends as assessed in Wave 4 of the main study and on the conflict resolution styles with mothers, fathers, and best friends as assessed in Wave 4 of the main study between adolescents who returned the diaries ( $n = 72$ ) and adolescents who chose not to participate or to return the diaries ( $n = 41$ ):  $F(3, 106) = 1.31, ns$ , and  $F(9,100) = 1.35, ns$ , respectively. A MANOVA did show differences in conflict frequency with mothers, fathers, and best friends as assessed in Wave 4 of the main study between adolescents who returned the diaries ( $n = 72$ ) and adolescents who chose not to participate or to return the diaries ( $n = 41$ ):  $F(3, 106) = 3.91, p < .05$ . Pairwise comparisons showed that adolescents who chose not to participate or to return the diaries had significantly higher levels of conflict in Wave 4 with their best friend than adolescents who returned their diaries. A MANOVA showed no differences between adolescents who chose to participate ( $n = 90$ ) and adolescents who chose not to participate ( $n = 23$ ) on relationship satisfaction, conflict frequency, and conflict resolution styles with their mothers, fathers, and best friends as assessed in Wave 4 of the main study:  $F(3, 106) = 0.35, ns$ ,  $F(3, 106) = 2.65, ns$ , and  $F(9,100) = 1.46, ns$ , respectively.

### 5.2.2 Procedure

For the main study, both adolescents and their parents received a letter in which the aims of the CONAMORE study were described and, if the adolescent wished to participate, both adolescents and their parents were required to provide written informed consent. Less than 1% of the adolescents decided not to participate. For the diary study, adolescents received a letter with an invitation to participate in a “diary study concerning the daily lives of adolescents”. Adolescents who agreed to participate received the diary by mail. The diary consisted of several questions that had to be filled out daily for seven consecutive days. The adolescents were instructed to fill out the diary each day before they went to bed. When they had forgotten to fill out the diary, they were instructed to fill it out first thing in the morning. The adolescents also received an envelope in which they could return the completed diary.

Confidentiality of responses was guaranteed. Adolescents received €10 (approximately \$12) for their participation. By means of a lottery, ten percent of the participants received an extra €10.

### 5.2.3 Measures

In the current study, we used an adaptation of the Rochester Interaction Record (RIR; Reis & Wheeler, 1991; see also Jensen-Campbell & Graziano, 2000). The RIR consists of a standardized fixed, Likert-type format. However, its content is intended to be flexible and responsive to the researchers' theoretical interests. This approach has been found to be more accurate and better specified than global self-report questionnaires (Reis & Wheeler, 1991). We specifically used the interval-contingent recoding methodology, implying that adolescents had to report their experiences at a certain, predetermined interval.

In the current study, adolescents had to answer questions regarding the relationship with their mothers, fathers, and best friends each day for seven consecutive days. Friendships were assessed by letting each participant nominate their best friend. When adolescents had more than one best friend, they were instructed to choose one. They also had to indicate how many conflicts they had had that day with their mothers, fathers, and best friends. Finally, for each specific conflict that had occurred, they had to fill out to what extent they used each of three conflict resolution styles. On average, adolescents completed 6.9 of the seven days.

*Daily relationship characteristics.* First, adolescents were asked to indicate the amount of time that they had spent with their mother, father, and best friend that day. On days adolescents did not see or spoke to their mother, father, or best friend, they were instructed to skip further questions for that day. Then, they had to rate how satisfied they were with each relationship that day by rating the statement: "I was satisfied today with the relationship with my mother/ father/ best friend". They had to rate these questions on a 5-point Likert scale ranging from *not true at all* to *entirely true*. After that, they had to indicate how many conflicts had occurred that day with their mother, father, and best friend. Conflict was defined as interpersonal disagreement, and participants were instructed as follows (see also Laursen, 1995; Shantz, 1987): "A disagreement can range from a difference of opinion to an argument. A disagreement does not necessarily mean that someone is angry. For this questionnaire, a disagreement consists of the following: You objected to something someone else said or did, or someone objected to what you said or did; or you and someone else had a quarrel or an argument".

For validation purposes, we computed a mean score for adolescents' perceived relationship satisfaction with their mother when the adolescent had seen his or her mother at least five out of seven days ( $n = 68$ ). We applied the same strategy for computing a mean score for adolescents' perceived relationship satisfaction with their father ( $n = 61$ ). Since adolescents do not necessarily see their best friends on a daily basis (for example they might not go to the same school), we used a less stringent criterion for computing a mean score for adolescents' perceived relationship satisfaction with their best friend: The mean score on perceived relationship satisfaction was computed when the adolescent had seen his or her best friend at least three days that week ( $n = 62$ ). We applied the same strategy for the mean level of conflict on a specific day ( $n = 67$ ,  $n = 62$ , and  $n = 62$  for conflicts with mothers, fathers, and best friends, respectively).

Then, we compared our measures of perceived relationship satisfaction and conflict with global questionnaires on relationship satisfaction (the Satisfaction scale of the Investment Model Scale, see Rusbult, Martz, & Agnew, 1998) and conflict frequency (the Interpersonal Conflict Questionnaire, see Laursen, 1993b, 1995) that were administered six months before the diary study was conducted. Pearson's correlations showed that the relationship between the mean level of perceived relationship satisfaction during the diary study and the score on the Satisfaction scale six months earlier was .60, .65, and .36, for adolescents' relationships with their mothers, fathers, and best friends respectively (all  $ps < .01$ ). With regard to the conflict measure, Pearson's correlations showed that the relationship between the mean level of conflict during the diary study and the score on the conflict measure six months earlier was .42, .48, and .43, for adolescents' relationships with their mothers, fathers, and best friends, respectively (all  $ps < .01$ ).

Further validating our measure, separate composites were computed for perceived relationship satisfaction and conflict on even and odd days. Correlations for perceived relationship satisfaction between even and odd days were .73, .75, and .39 for the relationship with mothers, fathers, and best friends, respectively (all  $ps < .01$ ). Correlations for conflict between even and odd days were .60, .54, and .48 for the relationship with mothers, fathers, and best friends, respectively (all  $ps < .01$ ). Standard measures of internal consistencies are not appropriate indicators of reliability with diary data, because there is no reason to expect or desire consistency across interactions. However, as some degree of consistency should appear, computing split-half correlations is recommended in this case (Reis & Wheeler, 1991).

*Conflict resolution styles.* For each conflict that had occurred that day, adolescents were asked to fill out what conflict resolution styles they used during the conflict, using the styles Kurdek (1994) distinguished as conflict engagement, positive problem solving, and withdrawal. This questionnaire, originally designed for couples, was modified so that it referred to parents and adolescents. This measure has shown validity in studies on parent-adolescent relationships and friendships (Branje, Van Doorn, Vandervalk, Meeus, 2008; De Wied, Branje, & Meeus, 2007; Van Doorn, Branje, & Meeus, 2008). Each style was measured by one item that was a composite of the original items. Conflict engagement was assessed by the item: “I got angry, assaulted the other person and/or lost self-control”. Positive problem solving was measured by the item: “I tried to find a solution that was mutually acceptable and/or tried to discuss our differences of opinion thoroughly”. Withdrawal was measured by the item: “I refused to talk about it any longer, did not listen anymore and/or acted as if I did not care about it anymore”. Adolescents had to rate to what extent they used each conflict resolution style on a 5-point Likert scale ranging from *not true at all* to *entirely true*.

Since we want to compare the occurrence of no conflict on a specific day with the occurrence of conflict that is handled constructively and conflict that is handled unconstructively, we distinguished between no conflict, unconstructively handled conflict, and constructively handled conflict. When adolescents had more than one conflict in a specific relationship on a specific day, the one the adolescent perceived as most important was selected. When conflicts were rated as equally important, we choose one conflict per relationship at random. To construct scores for constructive and unconstructive conflict, we considered the balance between the use of the positive style and the use of the two negative styles: A conflict was classified as “unconstructively handled” when the level of either conflict engagement or withdrawal was higher than or equal to the level of positive problem solving. A constructively handled conflict was identified when the level of positive problem solving was higher than both the level of conflict engagement and the level of withdrawal. Subsequently, we created one dummy variable for constructive conflict resolution (versus no conflict and unconstructively handled conflict) and one dummy variable for unconstructive conflict resolution (versus no conflict and constructive conflict resolution). The occurrence of no conflict was coded 0 for both dummy regressors, so “no conflict” served as a baseline category with which the two conflict resolution types were compared. In that way we were able to compare the contribution of each category on the dependent variable. Table 5.1 shows that differences in means and in range of scores on the three conflict resolution styles were in the expected direction.

Table 5.1

*The Level of Conflict Engagement, Positive Problem Solving, and Withdrawal for Dummy Variables Constructive and Unconstructive Conflict*

	Conflict engagement		Positive problem solving		Withdrawal	
	<i>M (SD)</i>	Range	<i>M (SD)</i>	Range	<i>M (SD)</i>	Range
Constructive conflict						
Mothers ( <i>n</i> = 68)	1.75 (.83)	1-4	3.79 (.58)	2-5	1.68 (.74)	1-3
Fathers ( <i>n</i> = 48)	1.50 (.65)	1-3	3.60 (.89)	2-5	1.57 (.66)	1-3
Best friends ( <i>n</i> = 42)	1.48 (.59)	1-3	3.81 (.80)	2-5	1.45 (.59)	1-3
Unconstructive conflict						
Mothers ( <i>n</i> = 91)	2.24 (1.12)	1-5	2.07 (.83)	1-4	2.80 (1.14)	1-5
Fathers ( <i>n</i> = 54)	2.56 (1.13)	1-5	2.06 (.83)	1-4	2.70 (1.25)	1-5
Best friends ( <i>n</i> = 24)	2.58 (1.21)	1-5	2.17 (.92)	1-4	2.67 (1.09)	1-5

*Note.* *N* refers to the number of conflicts in that specific category and is based on all days of the week.

### 5.3 Results

#### 5.3.1 Descriptive Statistics

The total number of conflicts with mothers during the week ranged from 0 to 11 and the total number of conflicts with fathers during the week ranged from 0 to 9. On average, adolescents reported .41 conflicts with their mothers per day ( $SD = .40$ ) and .26 conflicts per day ( $SD = .31$ ) with their fathers. The total number of conflicts with best friends ranged from 0 to 5 during the week with an average of .23 conflicts per day ( $SD = .31$ ). A repeated measures ANOVA showed significant differences between adolescents' mean level of conflict with their mothers, fathers, and best friends:  $F(2,51) = 7.43, p < .01$ . Posthoc comparisons showed that adolescents had significantly more conflicts with their mothers than with their best friends ( $p < .01$ ). There were no significant differences between the average number of conflicts per day with mothers and fathers, and between the average numbers of conflicts per day with fathers and best friends. There were no differences between boys and girls in mean level of conflict:  $F(1,52) = 0.74, ns$ .

Adolescents' mean level of relationship satisfaction with their mothers, fathers, and best friends was 4.04 ( $SD = .56$ ), 4.00 ( $SD = .66$ ), and 4.15 ( $SD = .44$ ), respectively. A repeated

measures ANOVA showed no significant differences between adolescents' mean level of relationship satisfaction with their mothers, fathers, and best friends:  $F(2,52) = 2.55, ns$ . There were no differences between boys and girls in mean relationship satisfaction:  $F(1,53) = 2.16, ns$ . The interaction between mean levels of perceived relationship satisfaction and sex of the adolescent was also not significant:  $F(2,52) = 1.00, ns$ . Skewness values of mean level of perceived relationship satisfaction were not significant (the absolute values ranged from -0.21 to .30), indicating that these variables did not differentiate much from the normal distribution. The means and standard deviations on the conflict resolution styles are shown in Table 5.2. Whereas the skewness values of the scores on positive problem solving with mothers, fathers, and best friends were not significant (absolute values ranged from .16 to -.31), skewness of the scores on conflict engagement and withdrawal were significant for the relationship with mothers, fathers and best friends (the absolute values ranged from .53 to 1.16). This means that the scores on conflict engagement and withdrawal were positively skewed.

Table 5.2

*Means, Standard Deviations, and Range of the Conflict Resolution Styles in Adolescents' Relationships with their Mothers, Fathers, and Best Friends*

	Mothers ( $n = 159$ )		Fathers ( $n = 102$ )		Best friends ( $n = 66$ )	
	$M$ ( $SD$ )	Range	$M$ ( $SD$ )	Range	$M$ ( $SD$ )	Range
Conflict engagement	2.03 (1.03)	1-5	2.06 (1.07)	1-5	1.88 (1.02)	1-5
Positive problem solving	2.80 (1.13)	1-5	2.78 (1.16)	1-5	3.21 (1.16)	1-5
Withdrawal	2.32 (1.13)	1-5	2.17 (1.16)	1-5	1.89 (0.99)	1-5

*Note.* N refers to the number of conflicts in that particular relationship and is based on all days of the week.

### ***5.3.2 The Relationship between Mean Level of Conflict and Mean Level of Perceived Relationship Satisfaction***

The first research question was how conflict and perceived relationship satisfaction are related to one another. To answer this question, we computed Pearson correlations at the individual level. Correlations showed that there was a significant negative relationship between the average number of conflicts during the week with mothers, fathers, and best friends, and mean levels of perceived relationship satisfaction with mothers, fathers, and best friends ( $r = -.47, p < .001, r = -.42, p < .001, \text{ and } r = -.32, p < .05, \text{ respectively}$ ). This

means that adolescents who had a higher average number of conflicts during the week with their mothers rated the relationship satisfaction with mothers significantly lower than adolescents who had a lower average number of conflicts during the week with their mothers. The same pattern of results was found for adolescent-father and adolescent-best friend relationships.

### 5.3.3 *Diary Data Analysis*

To answer the other research questions, we conducted multilevel analyses. Multilevel modeling, also known as hierarchical linear modeling (HLM), has become the standard data analytic approach for diary data (Bolger, Davis, & Rafaeli, 2003). The reasons to conduct multilevel analyses on our data were twofold. First, the diary data are hierarchically nested. Multiple measurements were collected within individuals over time and therefore these measurements were not independent from each other. A second reason is that multilevel modeling enables examining within-person variability. Indeed, we found in our models that the estimated variance was significant at both levels for each relationship, indicating both between-person variability and within-person variability. In other words, the perceived relationship satisfaction significantly differs between adolescents, but also within adolescents across the days. We used multilevel *process* analyses, a less familiar application of multilevel modelling that has received more attention recently (Papp, 2004). Multilevel process analyses is similar to the growth curve approach, but instead of expecting a more general increase or decline in the dependent variable over time, we expect an increase or decline in the dependent variable caused by a predictor other than time. More specifically, we do not expect relationship satisfaction to decline or increase over the several days. Instead, we expect the *occurrence of a conflict* to have an impact on the perceived relationship satisfaction. As we focus on the occurrence of conflict and have no predictions regarding growth or decline across the seven days, our data are especially well suited for the multilevel process approach. Our data consisted of 2 levels: level 1 was the day level, and level 2 was the individual level. In our multilevel analyses, we only used level 1 variables (i.e., perceived relationship satisfaction on a particular day, the occurrence of conflict on a particular day, and the use of certain conflict resolution styles on a particular day when there was a conflict that day). Initially, we controlled for sex of the adolescent in our analyses, which is a level 2 variable, but as the effect of sex of the adolescent was not significant and the results did not change, we left sex of the adolescent out of the final model.

*The relationship between daily conflict and daily perceived relationship satisfaction.* To investigate our second research question, that is, whether the perceived relationship satisfaction is lower on days on which conflict occurred than on days no conflict occurred, we controlled for relationship satisfaction on the day before. Relationship satisfaction on the day before was centered in order to make sure that the intercept can be meaningfully interpreted. By allowing the model to estimate random effects for relationship satisfaction on the day before, we allowed different persons to have different relationships between satisfaction on one day and the next. In our analyses, conflict was recoded into a dichotomous variable (i.e., a score of zero indicated no conflict and a score of one indicated one or more conflicts).

The upper panel of Table 5.3 shows that relationship satisfaction with mothers and fathers on one day was significantly related to relationship satisfaction one day later, although this relationship was only moderately high in the adolescent-mother relationship. Relationship satisfaction with best friends was not significantly related to relationship satisfaction one day later. Allowing the slope of satisfaction on the day before to vary across individuals, and thus allowing different persons to have different relationships between satisfaction on one day and the next, significantly improved the model for the adolescent-mother and adolescent-best friend relationship ( $\Delta\chi^2(2) = 15.93, p < .01$ , and  $\Delta\chi^2(2) = 6.07, p < .05$ , respectively), but only marginally for the adolescent-father relationship ( $\Delta\chi^2(2) = 5.70, p = .06$ ). However, in order to be able to compare the different models, we decided to include the random regression coefficient for satisfaction on the day before in the adolescent-father model as well. The variance of the slope of satisfaction on the day before was significant for the relationship with mothers, fathers, and best friends ( $\mu = .11, p < .01$ ,  $\mu = .08, p < .05$ , and  $\mu = .09, p < .05$ , respectively), indicating that there were also significant differences between individuals in the slope of satisfaction from one day to the next. As can be seen from the upper panel of Table 5.2, adolescents rated the perceived relationship satisfaction with their mothers, fathers, and best friends significantly lower on days on which conflict occurred than on days no conflict occurred, even when we controlled for relationship satisfaction on the day before.

For our third research question regarding the lagged effect of conflict – or the relationship between conflict and perceived relationship satisfaction one day later – we repeated the former analyses, but now also entered conflict on the day before in the model. Thus, in these analyses we investigated how conflict on one day and relationship satisfaction one day later were related to one another, controlling for relationship satisfaction on the day before, and controlling for concurrent conflict. This approach minimizes the occurrence of floor effects. In addition,

Table 5.3

*The Relationship between Conflict and Perceived Relationship Satisfaction*

Measure	Perceived Relationship Satisfaction					
	Mothers ( <i>n</i> = 361)		Fathers ( <i>n</i> = 303)		Best Friends ( <i>n</i> = 199)	
	B	$\beta$	B	$\beta$	B	$\beta$
Intercept	4.19		4.07		4.23	
Relationship satisfaction on previous day ( <i>t</i> - 1)	.14**	.15	.53**	.51	.07	.07
Conflict on current day ( <i>t</i> )	-.63**	-.37	-.53**	-.25	-.50**	-.28
Intercept	4.19		4.05		4.18	
Relationship satisfaction on previous day ( <i>t</i> - 1)	.13*	.14	.56**	.54	.14*	.14
Conflict on current day ( <i>t</i> )	-.63**	-.37	-.53**	-.25	-.49**	-.28
Conflict on previous day ( <i>t</i> - 1)	.00	.00	.09	.04	.19*	.11

*Note.* *N* refers to the multiplication of number of days and number of persons.

\*  $p < .05$ . \*\*  $p < .01$ .

Seidman, Green, Rafaeli, Shrout, and Bolger (2004) showed with a simulation study that by using this “full” model regression artifacts or misinterpretations of the findings are unlikely to occur (see also Shrout, Seidman, Green, & Bolger, 2008).

The lower panel of Table 5.3 displays the results for the third research question. It appeared that conflict with mothers and fathers on one day was not significantly related to perceived relationship satisfaction one day later. However, conflict with best friends was significantly positively related to perceived relationship satisfaction one day later. This means that conflict with best friends on one day was associated with an increase in perceived relationship satisfaction with best friends one day later.

*The relationship between daily constructive and unconstructive conflict and daily perceived relationship satisfaction.* For our fourth research question, concerning the comparison of the occurrence of no conflict on a specific day with the occurrence of conflict that is handled constructively and conflict that is handled unconstructively, we again allowed different persons to have different relationships between satisfaction on one day and the next. Then the two dummy variables, containing constructive (versus no conflict and constructive

conflict) and unconstructive conflict (versus no conflict and unconstructive conflict), were entered into the model.

The results are displayed in the upper part of Table 5.4. Both dummy variables labelled constructively and unconstructively handled conflict were significantly negatively related to perceived relationship satisfaction for the relationship with mothers, fathers, and best friends. This means that both constructively handled conflict and unconstructively handled conflict significantly differed from the baseline category (i.e., no conflict). In other words, for all relationships, perceived relationship satisfaction was highest on days on which no conflict occurred, second highest on days on which constructively handled conflict occurred, and lowest on days on which unconstructively handled conflict occurred.

To investigate how different ways of handling conflict are related to perceived relationship satisfaction one day later (Research question 5), we repeated the former analyses but now also entered the dummy variables constructive and unconstructive conflict on the day before in the model. Thus, in these analyses we investigated how constructive conflict, unconstructive conflict, and the occurrence of no conflict on one day and relationship satisfaction one day later were related to one another, controlling for relationship satisfaction on the day before, and controlling for constructive conflict, unconstructive conflict, and the occurrence of no conflict on the same day. Again, this approach minimizes the occurrence of floor effects and possible misinterpretations of the findings (Seidman et al., 2004; Shrout et al., 2008). As can be seen from the lower section of Table 5.4, neither constructively nor unconstructively handled conflict was related to perceived relationship satisfaction one day later in the adolescent-mother and adolescent-father relationship. This means that conflict with mothers and fathers was not related to perceived relationship satisfaction one day later, regardless of whether conflict was handled constructively or unconstructively. Surprisingly, in the adolescent-best friend relationship, the dummy variable labelled unconstructively handled conflict appeared to be positively related to perceived relationship satisfaction one day later. This means that unconstructively handled conflict differed significantly from the baseline category (i.e., no conflict). The dummy variable constructively handled conflict was not significantly related to perceived relationship satisfaction one day later, meaning that constructively handled conflict did not significantly differ from the baseline category (i.e., no conflict). Taken together, this means that when adolescents handled conflict with their friends unconstructively, the perceived relationship satisfaction one day later was higher than when there was no conflict or when conflict was handled constructively.

Table 5.4

*The Relationship between Constructive Conflict, Unconstructive Conflict, and Perceived Relationship Satisfaction*

Measure	Perceived relationship satisfaction					
	Mothers (n = 361)		Fathers (n = 303)		Best friends (n = 199)	
	B	$\beta$	B	$\beta$	B	$\beta$
Intercept	4.18		4.07		4.25	
Relationship satisfaction on previous day (t-1)	.13*	.14	.53**	.51	.07	.07
Constructively handled conflict on current day (t)	-.49**	-.21	-.47**	-.18	-.38**	-.18
Unconstructively handled conflict on current day (t)	-.72**	-.37	-.59**	-.23	-.83**	-.31
Intercept	4.19		4.05		4.20	
Relationship satisfaction on previous day (t-1)	.12*	.12	.57**	.55	.16*	.16
Constructively handled conflict on current day (t)	-.49**	-.21	-.47**	-.18	-.39**	-.18
Unconstructively handled conflict on current day (t)	-.72**	-.37	-.60**	-.24	-.49**	-.29
Constructively handled conflict on previous day (t-1)	.06	.03	.00	.00	.13	.06
Unconstructively handled conflict on previous day (t-1)	-.06	-.03	.17	.07	.39*	.15

*Note.* *N* refers to the multiplication of number of days and number of persons. The constructively handled conflict variable was coded as follows: 0 = no conflict and unconstructively handled conflict, 1 = constructively handled conflict. Unconstructively handled conflict was coded as follows: 0 = no conflict and constructively handled conflict, 1 = unconstructively handled conflict. \*  $p < .05$ ; \*\*  $p < .01$ .

## 5.4 Discussion

The main purpose of the present study was to investigate how daily conflict is related to daily fluctuations in perceived relationship satisfaction. Conflict and perceived relationship satisfaction were found to be negatively related to each other on the same day in adolescents' relationships with their mothers, fathers, and best friends. The way conflicts are handled moderated this association, with unconstructively handled conflict being stronger negatively related to perceived relationship satisfaction than constructively handled conflict. In addition, conflict was positively related to perceived relationship satisfaction with best friends one day later, in particular when these conflicts were unconstructively handled. In line with our hypotheses, differences in the way conflict and relationship satisfaction were related to each other in parent-adolescent relationships and friendships were in line with the nature of these relationships.

### 5.4.1 *Same Day Relationships*

The results clearly show that, in line with our hypothesis, perceived relationship satisfaction in a particular relationship was lower on days on which conflict occurred than on days no conflict occurred in that particular relationship. This was true for adolescents' relationship with their mothers, fathers, and best friends. Further confirming our expectations, the way conflict was handled was also found to be related to perceived relationship satisfaction. On days unconstructively handled conflict took place, perceived relationship satisfaction was lower than on days either constructively handled conflict or no conflict took place. Moreover, perceived relationship satisfaction in a particular relationship was lower on days on which constructively handled conflict took place than on days on which no conflict took place in that particular relationship. Again, the same results were found for adolescents' relationship with mothers, fathers, and best friends. Although different correlates and consequences of constructive versus unconstructive conflict behavior have already been found in more traditional research (Dishion et al., 1995; Jackson et al., 1998; Jaffee & D'Zurilla, 2003; Oldenburg & Kerns, 1997; Rubenstein & Feldman, 1993; Tucker, McHale, & Crouter, 2003), our results extend these findings in that we found similar results at the daily level.

### 5.4.2 *Lagged Effects*

Perhaps the most interesting finding of this study was that we found some remarkable differences between adolescents' relationships with their parents and best friends when we

examined the lagged effect of conflict on perceived relationship satisfaction. Not inconsistent with previous research (Laursen, 1993a, 1993b), which found that adolescents expect most conflicts with their parents to have no impact on their relationship, we found that the effect of conflict with parents on perceived relationship satisfaction disappeared one day later. Thus, it seems that adolescents' conflicts with their parents are just temporary disruptions in their relationships and that the effect of a single conflict is modest.

Also, extending Laursen's research (1993a, 1993b) that found that adolescents expect a significant proportion of conflict with their friends to improve their relationship, conflict with best friends was indeed found to improve perceived relationship satisfaction one day later. The finding that conflict with best friends improved relationship satisfaction one day later reflects the openness of these relationships. This openness might lead to higher vulnerability of these relationships, which is in agreement with the social relational model (Hartup, 1992; Laursen & Collins 1994; Laursen et al., 1996). Whereas adolescents' relationships with their parents will be maintained regardless of the occurrence of conflict, the openness of adolescents' friendships makes them more prone to dissolution. Hence, when conflicts arise, adolescents will have to put more effort into these friendships in order to maintain them. They need to repair the relationship. Also, it is reasonable to imagine that conflict with best friends might be more salient to adolescents than conflict with parents. As a consequence, they might be more inclined to do something about it and restore the disturbed balance. However, we have to take into consideration that these results were based on friendships that were maintained, at least during the week of the diary study. Results might be different when friendships are broken.

When comparing the effect of unconstructively handled conflict and constructively handled conflict, we found neither constructively nor unconstructively handled conflict with parents to have an effect on relationship satisfaction one day later. Thus, again, the effect of a single conflict with parents is modest, regardless of whether it was handled constructively or unconstructively. The current study does not replicate the finding that a proportion of conflicts with parents made the relationship better and a proportion of conflicts made the relationship worse (Laursen, 1993a, 1993b). However, we did measure the effect of conflict on perceived relationship satisfaction in a different way than Laursen (1993a, 1993b) did. Perhaps other variables play a role in determining whether conflict has an effect on relationship satisfaction one day later, such as topic, outcome, or intensity of conflict.

In the relationship with best friends, we found especially *unconstructively* handled conflict to have a positive effect on perceived relationship satisfaction one day later. This was

a surprising finding, even more because we found that on the same day unconstructively handled conflict had a more negative impact on perceived relationship satisfaction than constructively handled conflict. Moreover, we would expect that constructively handled conflict would be likely to involve more positive emotions and therefore might be related to higher levels of perceived relationship satisfaction one day later. But again, friendships are vulnerable and conflicts with best friends make adolescents explicitly aware of their *open* and voluntary relationship. After an *unconstructively* handled conflict, the need for reparation might be even larger and adolescents might have to put even more effort in the relationship in order to maintain the friendship. The increase in relationship satisfaction one day later raises the question of what happened that day. One possibility is that the day after the conflict they make up and – as a consequence – are temporarily even more satisfied with the relationship than they were before.

Even though we found specific conflicts have a minimal impact on the relationship, this does not mean that there might be no cumulative effect of conflict. Our results at the daily level concern specific conflicts. At the individual level, however, we did find that adolescents who had on average more conflicts during the week with their mothers, fathers, and best friends, also rated the perceived relationship satisfaction during the week with their mothers, fathers, and best friends significantly lower. These results underscore the need to distinguish between daily conflict characteristics and their effects and more general dynamics and effects of conflict.

A remarkable finding was that perceived relationship satisfaction on one day was only moderately (and sometimes not significantly) related to perceived relationship satisfaction one day later in the adolescent-mother and adolescent-best friend relationship. In the adolescent-father relationship this association was rather high. What could account for this difference? A reason for the low stability might be due to the method applied, because interaction data ought to vary (Reis & Wheeler, 1991). Therefore, we might not expect high correlations from one day to the next. Also, as adolescents had to rate the relationship with their parents and best friends on a daily basis, it is possible that they used the former day as a benchmark for their ratings. In this way, more subtle changes emerge at the daily level that would not be obtained when asking a general perception of the relationship. However, this could not account for the difference in the relationship between perceived relationship satisfaction from one day to the next for adolescents' relationships with mothers and best friends as compared to fathers. We might explain this difference by looking at the characteristics of these specific relationships. For instance, it is known that the relationship adolescents have with their mothers and fathers

are distinct and that adolescent-mother relationships are more close and interdependent than adolescent-father relationships (for a review, see Collins & Russell, 1991; see also Smetana et al., 2006). Mothers are more involved in adolescents' daily lives than fathers, in that they spend more time raising adolescents than fathers, are engaged in more joint activities, and communicate more with them (Montemayor, & Brownlee, 1987; Waizenhofer, Buchanan, & Jackson-Newsom, 2004). Therefore, as a consequence, their daily relationship quality might also fluctuate more. The relationship with fathers has been found to be more distant (Youniss and Smollar, 1985) and might therefore be more stable. The same reasoning might hold when explaining why perceived relationship satisfaction with best friends is so minimally related from one day to the next. Adolescents are spending a lot of time with their friends and friends are very important in adolescents' lives. Moreover, close friendships are a great source of support and fulfil the need for intimacy (Collins & Steinberg, 2006; Csikszentmihalyi & Larson, 1984; Furman & Buhrmester, 1992; Helsen, Vollebergh, & Meeus, 2000). Because of the saliency of friends in adolescents' lives, these relationships might also be more sensitive to subtle changes. These findings are also in line with the theoretical idea that friendships, which are open relationships, are more vulnerable to contextual influences and consequently might fluctuate more than closed relationships, such as relationships with parents.

### **5.4.3 *Strengths and Limitations***

An important strength of the current study was the use of a daily diary approach. One of the most well-known advantages of diary studies is the substantial decrease of biases which are common to retrospective recalls over relatively long periods. By daily asking adolescents to rate their relationship satisfaction and to indicate how many conflicts they have had that day, recall bias is probably smaller than if we would ask adolescents to recall how many conflicts occurred with their mother, father, and best friend over the last seven days. Also, as the conflict rate was rather high in our sample, we think this increases the credibility of the responses. In addition, adolescents completed on average 6.9 of the seven days, which was pretty high. Another – perhaps even more important – advantage of diary studies is the possibility to detect the dynamics of relational processes that underlie within-person variability in adolescent conflict experiences. This means that adolescents' behavior can be compared to their own behavior rather than to another's behavior (Almeida, Wethington, & McDonald, 2001). In sum, diary studies can help determine the correlates and consequences of daily conflict experiences (Bolger et al., 2003).

A few caveats of this study should be noted. Some limitations result from the use of adolescent self-reports of their own conflict behavior. A more objective picture would be derived when parents and best friends also filled out the diary. For instance, we already know that conflicts have a different meaning for parents than for adolescents (Smetana, Killen, & Turiel, 1991) and that a higher level of conflict appears to be related to lower levels of parents' well-being (Deković, 1999). Therefore, the relationship between conflict, conflict resolution, and relationship satisfaction might be different for parents than for adolescents. Also, interactions are based on the behavior of at least two people. When we investigated the relationship between conflict resolution and relationship satisfaction, we only took into account adolescents' conflict behavior. It might also be important to consider the way the other person acted during the conflict, as this person's behavior and certain *patterns* or interactions of the conflict behavior of both individuals might be better or worse than others.

When interpreting the findings, we should also take into account that causality can not be implied. Especially with regard to the same day relationships, it is also possible that reduced perceived relationship satisfaction leads to conflict instead of the other way around. A related concern is that it is possible that whatever issue is leading to the conflict might also be causing the lower perceived relationship satisfaction. Finally, participants in our sample were all Dutch adolescents who lived with both parents. Future research should extend our findings to other types of families, for example less well-functioning families and single-households.

#### **5.4.4 Conclusions**

The current study provides a better understanding of adolescents' daily lives. By means of a diary study which includes multiple measurements within adolescents, we were able to examine within-person processes. Our results correspond to earlier research in that adolescents' relationships with their parents and friends are different and extend previous research in that we found support for the social relational model at the daily level. The finding that conflicts with parents are just temporary disruptions in these relationships is in line with adolescents' involuntary and more hierarchical relationships with their parents. Moreover, the results are in line with adolescents' awareness of the voluntary nature and vulnerability of their friendships and our results suggest that adolescents seem to act accordingly. How specific conflicts might be related to satisfaction in the relationship on the long-term is unknown. Given our results it is not likely that specific conflicts will have a long-term effect on relationship satisfaction. Future research might investigate moderators in this process. For instance, recurring conflicts that involve the same issue over and over again might have a

long-term impact on the relationship satisfaction. It is also possible that daily conflict and perceived relationship satisfaction might fluctuate more during transitional periods and that the conflicts adolescents have during these transitional periods might have a long-term impact on their relationships. Another possibility is that the relationship between conflict and relationship satisfaction is moderated by personality or attachment dimensions such as anxiety. For example, research on romantic relationships found that highly anxious individuals reported lower relationship satisfaction than less anxious individuals on days when they perceived greater conflict (Campbell, Simpson, Boldry, & Kashy, 2005). Future research might also focus on other measures of interest, for instance adolescent problem behavior. Perhaps adolescents who fluctuate more during a week in the occurrence of conflict and their ratings of relationship satisfaction are more prone for developing problem behavior. Future research might for instance examine daily fluctuations in conflict, relationship satisfaction, and delinquent activities and thereby get a better understanding of processes underlying day-to-day variability. Although these unanswered questions remain, we have provided first insights into the daily dynamics of conflict and relationship satisfaction and found that whereas unconstructively handled conflict with best friends might contribute to *better* interpersonal relations the next day, conflict with parents does not linger on.

## **General Discussion**



The current dissertation focused on conflict resolution in adolescent relationships. In this final chapter, we will provide a summary of the main findings and a general discussion of the four studies). Additionally, strengths and limitations of these studies as well as suggestions for future research are discussed. We will finish this dissertation with some concluding remarks.

## 6.1 Summary of the Main Findings

### 6.1.1 *Conflict Resolution in Parent-Adolescent Relationships and Adolescent Delinquency*

*How are conflict resolution styles in parent-adolescent relationships related to adolescent delinquency?*

The main goal of the first study was to examine how conflict resolution styles of both adolescents and parents were related to adolescent delinquency. Because the behaviors of both individuals in a dyadic relationships are interdependent and adolescents and parents are thought to mutually influence each other (e.g., Hinde, 1997; Kenny & Cook, 1999), we explicitly examined the interplay of conflict behaviors by both adolescents and parents. More specifically, we investigated how the use of conflict engagement, positive problem solving, and withdrawal by parents and adolescents was related to delinquency. In order to meet this goal, we first examined whether the way *adolescents* resolve conflicts with their parents was related to adolescent delinquency. Then, we investigated whether the way *parents* resolve conflicts with adolescents was related to adolescent delinquency. Finally, we examined whether specific *combinations* of conflict resolution styles by parents and adolescents were related to delinquency. The combinations we examined were the demand-withdraw pattern and a mutually hostile interaction pattern. The demand-withdraw pattern has already been shown to be related to maladjustment both in parent-adolescent relationships and marital relationships (Caughlin & Malis, 2004a, 2004b; Kurdek, 1995). We expected a mutually hostile interaction pattern to be related to higher levels of delinquency, as coercion theory states that delinquent children are often found to be part of a family system that is characterized by angry interactions between parents and children (Patterson, 1982, 1995).

We demonstrated that conflict engagement of adolescents with both mothers and fathers was related to higher levels of delinquency, although this effect was moderated by the conflict resolution style of the parent. This relation has been found independently of the number of

conflicts and conflict affect. This finding is consistent with previous research (Jaffee & D’Zurilla, 2003; Rubenstein & Feldman, 1993; Sanders, Dadds, Johnston, & Cash, 1992) and suggests that adolescents who respond angrily to parent-adolescent conflict, also respond less appropriately outside the home and display delinquent behavior (Chang, D’Zurilla, & Sanna, 2004; Jaffee & D’Zurilla, 2003).

We found that parents’ conflict resolution styles were only related to adolescent delinquency in combination with conflict engagement of adolescents. In adolescent-father relationships, the demand-withdraw pattern in which adolescents demand and fathers withdraw was related to higher levels of adolescent delinquency. This combination of styles has also been found to be detrimental for adolescent self-esteem and foster drug use (Caughlin & Malis, 2004a, 2004b). In adolescent-mother relationships, a mutually hostile interaction pattern (i.e., conflict engagement by both adolescents and mothers) was found to be related to higher levels of adolescent delinquency. This is in line with coercion theory, which states that delinquent adolescents are often found to be part of a family system marked by reciprocal hostility (Dadds, Sanders, Morrison, & Rebgetz, 1992; Patterson, 1982, 1995). We only found this pattern to be related to adolescent delinquency in relationship with mothers, which is in agreement with previous studies (Kringsley & Bry, 1991; Sanders et al., 1992).

### ***6.1.2 Reciprocity of Conflict Resolution Styles in Parent-Adolescent Relationships: A Four-Wave Longitudinal Study***

*How does adolescent and parent conflict resolution develop? Can different groups of parent-adolescent dyads be distinguished longitudinally based on the conflict resolution styles they use?*

The main purpose of the second study was to investigate changes in conflict resolution styles in parent-adolescent relationships from early to middle adolescence and to examine whether different parent-adolescent dyads could be distinguished based on the developmental configurations of conflict resolution styles. As parent-adolescent relationships realign during adolescence and ideally become more egalitarian (Russell, Petit, & Mize, 1998; Youniss & Smollar, 1985), we expected to find changes in conflict resolution between adolescents and parents that match the new relationship demands. Based on stage-environment fit theory (Eccles et al, 1993), we expected that for some parent-adolescent dyads the realignment process to a more horizontal, egalitarian relationship would be more stressful than for other dyads. Therefore, we expected to find groups of parent-adolescent

dyads who differed in the extent to which they used the conflict resolution styles conflict engagement, positive problem solving, and withdrawal.

Using latent growth curve models we demonstrated that both adolescents and parents developed in their use of conflict resolution styles. Adolescents' use of positive problem solving with mothers was found to increase from early to middle adolescence, which was in line with theoretical views on cognitive maturation during adolescence (Sandy & Cochran, 2000; Selman, 1980; Youniss & Smollar, 1985). Moreover, conflict engagement and withdrawal of adolescents with mothers developed curvilinear: These styles increased from early adolescence on and started to decline around mid-adolescence. Adolescents' use of positive problem solving and conflict engagement with fathers did not change, whereas withdrawal of adolescents with fathers increased. The development of more mature conflict resolution and less negative conflict resolution styles did not seem to occur for adolescents' relationships with fathers, although the increase in withdrawal of adolescents with fathers might reflect greater autonomy of adolescents.

With regard to changes in conflict resolution styles of fathers and mothers, we found that conflict engagement of both fathers and mothers decreased over time. Withdrawal of fathers and mothers did not change on average. The development of positive problem solving was different for fathers and mothers: Positive problem solving of fathers increased over time and positive problem solving of mothers did not change on average. Thus, these results generally showed that both parents and adolescents changed the way they resolved conflicts with each other from early to middle adolescence. The changes were generally in line with the changing demands of their relationships, namely greater egalitarianism (Collins, 1990, 1995; Russell et al., 1998; Steinberg, 1990; Youniss & Smollar, 1985).

In order to examine whether different groups of parent-adolescent dyads could be distinguished longitudinally, latent class growth analyses were performed. We demonstrated that both within adolescent-mother and within adolescent-father relationships, two different groups of parent-adolescent dyads could be distinguished longitudinally. Parents and adolescents of the first group reported lower levels of conflict engagement and withdrawal than parents and adolescents of the second group. The two pathways of adolescent-mother relationships were additionally characterized by different levels of positive problem solving of mothers. Thus, in line with stage-environment fit theory (Eccles et al., 1997), it seems that for some parent-adolescent dyads the realignment process from an asymmetrical parent-adolescent relationship towards a more egalitarian parent-adolescent relationship might be more stressful than for others. Although we found no significant differences in the

development of conflict resolution styles of both groups, one group did show more realignment than the other as indicated by significant increases of positive problem solving and significant decreases in conflict engagement. However, the two types of parent-adolescent dyads were especially found to be qualitatively different in their mean levels of the negative conflict resolution styles conflict engagement and withdrawal. This suggests that these either positive or negative parent-adolescent dyads already existed at the moment we conducted our study and that their interaction patterns were maintained during the time of the study. These results might be interpreted as ongoing reciprocal effects, in which parents and adolescents mutually influence each other. This also implies continuity in family relationships, as positive and negative parent-adolescent relationships were maintained at least from early to middle adolescence. This is in agreement with theoretical perspectives that emphasize continuity rather than discontinuity of family relationships (Steinberg, 1990) and with empirical studies (e.g., Overbeek, Stattin, Vermulst, Ha, & Engels, 2007). Also, supporting coercion theory (Patterson, 1982, 1995) and other theories that emphasize bidirectionality (Hinde, 1997; Lollis & Kuczynski, 1997; Minuchin, 1985; Stafford & Bayer, 1993), higher levels of a certain conflict resolution style by adolescents were accompanied by higher levels of the same conflict resolution style by parents.

### ***6.1.3 Longitudinal Transmission of Conflict Resolution Styles from Marital Relationships to Adolescent-Parent Relationships***

*Does transmission of conflict resolution styles from marital relationships to adolescent-parent relationships occur?*

In the third study we longitudinally investigated whether the way adolescents resolved conflicts with their parents could be explained by the way parents resolved conflicts with each other. We tested whether conflict resolution in the marital relationship influenced conflict resolution in the adolescent-parent relationship or vice versa or whether conflict resolution in both family subsystems influenced each other. More specifically, we investigated how conflict engagement, positive problem solving, and withdrawal in the marital relationship was related to conflict engagement, positive problem solving, and withdrawal, respectively, in the adolescent-parent relationship two years later. Based on family systems theory (Minuchin, 1985), which emphasizes the hierarchy of family subsystems and regards the marital subsystem as the one with the largest influence, we expected to find transmission effects from marital relationships to adolescent-parent relationships. Moreover, social learning theory

(Bandura, 1977) and attachment theory (Bowlby, 1969; Fincham, Grych, & Osborne, 1994) also provide support for our expectation, as adolescents might imitate conflict resolution styles and construct internal working models of conflict resolution when observing marital conflict.

We demonstrated that transmission from marital relationships to adolescent-parent relationships occurred for the conflict resolution styles conflict engagement and positive problem solving, which was in line with our expectations. In our study, we did not find bidirectional influences of conflict resolution styles between marital relationships and adolescent-parent relationships, although family systems theory also recognizes bidirectional influences. We found no transmission from marital relationships to adolescent-parent relationships with regard to withdrawal. An explanation for this might be that withdrawal in the marital relationship is less visible for adolescents. When parents use the conflict resolution style withdrawal with each other it might also appear as if there is no conflict, as withdrawal is characterized by withdrawing from the situation, and avoiding to talk. Therefore it is less likely that adolescents imitate this style or that this style affects their working models of conflict resolution.

Processes that we found to occur within families might also be generalizable outside the family context. With this study, we demonstrated transmission effects of conflict engagement and positive problem solving from marital relationships to adolescent-parent relationships. Perhaps this transmission might be an ongoing process and continues as adolescents generalize the styles they use with their parents and apply them during conflicts with their friends. As friends offer adolescents unique opportunities to practice compromising, it is also possible that compromising skills will be learned in the peer-context and generalized during conflicts with parents. However, this is an area for future investigation.

#### ***6.1.4 Intraindividual Variability in Adolescents' Perceived Relationship Satisfaction: The Role of Daily Conflict***

*How is conflict on one day related to perceived relationship satisfaction on the same day in a particular relationship? Is this relation different for the occurrence of no conflict, constructively handled conflict, and unconstructively handled conflict? How is conflict on one day related to perceived relationship satisfaction one day later in a particular relationship? Is this relation different for the occurrence of no conflict, constructively handled conflict, and unconstructively handled conflict?*

In the fourth study, we examined the daily dynamics of adolescent conflict and perceived relationship satisfaction with mothers, fathers, and best friends. We conducted multilevel analyses to investigate whether adolescents were less satisfied with a particular relationship on days on which conflict occurred in that relationship than on days on which no conflict occurred. We also investigated whether this relation was different for the occurrence of no conflict, constructively handled conflict, and unconstructively handled conflict. Subsequently, we investigated whether the occurrence of conflict on one day was related to perceived relationship satisfaction one day later, controlling for relationship satisfaction on the day before. Again, we investigated whether this relation was different for the occurrence of no conflict, constructive conflict, and unconstructive conflict. We expected to find differences in conflict dynamics between adolescents' conflicts with parents and friends. The social relational model (Laursen & Collins, 1994; Laursen, Hartup, & Koplas, 1996) states that relationships with parents and friends are both described by the highest level of closeness, but they differ with regard to their *openness*. Parent-adolescent relationships are *closed* relationships: they are constrained by kinship and law and they are not easily dissolved. With regard to conflict, this suggests that conflicts with parents might be the most intense, but the least disruptive ones. In contrast, friendships are *open* relationships, in that they are voluntary and more easily formed and dissolved. As a consequence, friendships are also more vulnerable. Therefore, when conflicts with friends arise, adolescents will put more effort in their relationship in order to maintain it. They need to repair the relationship after a conflict occurred.

We found that, in line with our expectations, perceived relationship satisfaction with mothers, fathers, and best friends was lower on days on which conflict occurred in those relationships than on days on which no conflict occurred. More specifically, we found that perceived relationship satisfaction was lowest on days on which unconstructive conflict occurred, second lowest on days constructive conflict occurred, and highest when no conflict occurred that day. This is in line with traditional research on the correlates of conflict and conflict resolution behavior (Dishion, Andrews, & Crosby, 1995; Jackson, Bijstra, Oostra, Bosma, 1998; Jaffee & D'Zurilla, 2003; Oldenburg & Kerns, 1997; Rubenstein & Feldman, 1993; Tucker, McHale, & Crouter, 2003). With our diary design we showed that similar results could be found at the daily level.

We found that conflict with parents was not related to perceived relationship satisfaction one day later. In contrast, adolescents who have had conflicts with best friends on one day were more satisfied with their relationship one day later. This was especially the case when

conflicts were unconstructively handled. These findings are in line with research on the expected impact of conflict on relationships (Laursen, 1993a, 1993b), which found that adolescents expected most conflicts with parents to have no long-term impact on the relationship whereas they expected a substantial part of conflicts with best friends to improve their relationship.

The finding that conflicts with best friends improved the relationship could be explained by the social relational model (Laursen & Collins, 1994; Laursen et al., 1996). The fact that especially unconstructively handled conflict was found to be related to higher relationship satisfaction one day later implies that the need for reparation in friendships might be even higher after an unconstructively handled conflict. With this diary study, we were able to investigate daily processes within adolescent relationships. Our results clearly reveal different conflict dynamics in adolescent relationships with parents and friends.

Table 6.1 provides an overview of the main findings of the current dissertation.

Table 6.1. Summary of the Main Findings of this Dissertation

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Chapter 2	<ul style="list-style-type: none"> <li>• The relation between the way adolescents handled conflict with their parents and adolescent delinquency was moderated by the way parents resolved conflicts with their adolescents.</li> <li>• Whereas the demand-withdraw pattern was found to be related to delinquency in adolescent-father dyads, a mutually hostile interaction pattern was found to be related to delinquency in adolescent-mother dyads.</li> </ul>
Chapter 3	<ul style="list-style-type: none"> <li>• Both adolescents and their parents generally developed in their use of conflict resolution styles.</li> <li>• Two different types of parent-adolescent dyads were distinguished based on their longitudinal configurations of conflict resolution styles: a positive type and a negative type.</li> </ul>
Chapter 4	<ul style="list-style-type: none"> <li>• The way parents resolved conflicts with each other was related to the way adolescents resolved conflicts with their parents two years later.</li> </ul>
Chapter 5	<ul style="list-style-type: none"> <li>• Conflict and perceived relationship satisfaction were negatively related to each other at the daily level, with the largest negative effect of unconstructively handled conflict.</li> <li>• Conflict with parents was not related to perceived relationship satisfaction with parents one day later.</li> <li>• Conflict – and especially unconstructively handled conflict – with friends was related to higher perceived relationship satisfaction one day later.</li> </ul>

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## 6.2 Conclusions and General Discussion

### 6.2.1 *The Role of Conflict Resolution by Parents*

The aim of the current dissertation was to investigate conflict resolution in adolescent relationships. In Chapter 2, 3, and 4, we demonstrated the importance of *parental* conflict resolution. First, the way parents resolved conflict with each other was found to be of significance for the way adolescents resolved conflict with their parents. Thus, it seems that parents serve as a role model for their adolescents in both positive and negative conflict

resolution styles. When they display positive conflict resolution with each other, it is more likely that their adolescents will also display this positive behavior during parent-adolescent conflict. However, when parents handle conflict with each other by being verbally abusive, getting very angry, or losing self-control, they are more likely to face adolescents displaying that same behavior towards them.

Also, parents and adolescents seemed to reciprocate their use of certain conflict resolution styles. We found two longitudinal pathways of parent-adolescent dyads that differed in their mean levels of conflict resolution styles and these pathways were maintained by both parents and adolescents. Thus, both parents and adolescents actively participate in the mutual and reciprocal process of redefining their relationship.

Finally, the way parents handled conflict with adolescents was found to moderate the relation between adolescent conflict resolution and adolescent delinquency. When mothers used higher levels of conflict engagement in combination with higher levels of conflict engagement by adolescents, adolescents reported higher levels of delinquency. However, when mothers used lower levels of conflict engagement in combination with higher levels of conflict engagement by adolescents, adolescents reported lower levels of delinquency. Thus mothers' reaction served as a buffer for the association between adolescent negative conflict resolution and adolescent delinquency. The same was true for fathers' use of withdrawal. When fathers used higher levels of withdrawal in combination with higher levels of conflict engagement by adolescents, adolescents reported higher levels of delinquency than when fathers used lower levels of withdrawal. Thus, non-withdrawing fathers seemed to protect angry adolescents against committing delinquent behaviors.

In sum, the way parents handle conflict was found to be important for adolescents' functioning. More specifically, the way parents handle conflict with each other was related to the way adolescents resolve conflict with their parents two years later, the way parents handle conflict with their adolescents was continuously related to the way adolescents resolve conflicts with them, and finally, the way parents resolve conflict with their adolescents was found to moderate the effect of adolescent conflict resolution on delinquency.

### ***6.2.2 Conflict Resolution in Adolescent-Father versus Adolescent-Mother Relationships***

With regard to conflict resolution in adolescents' relationships with fathers versus mothers both similarities and differences were found. In Chapter 3, we demonstrated that the development of conflict engagement and withdrawal was the same for fathers and mothers: Conflict engagement of both parents decreased and withdrawal of both parents did not change

on average. Also, we demonstrated two similar longitudinal pathways for adolescent-father and adolescent-mother relationships: a negative type and a positive type. Finally, our diary study (Chapter 5) showed similar daily dynamics for the relation between conflict, conflict resolution, and relationship satisfaction in adolescent-father and adolescent-mother relationships.

Despite these similarities, we also demonstrated some differences between adolescents' relationship with fathers and mothers. In Chapter 2, we showed that whereas the pattern in which both adolescents and mothers used conflict engagement was related to higher levels of delinquency, the demand-withdraw pattern was found to be related to higher levels of delinquency in adolescent-father relationships. This difference might be explained by the fact that adolescent-mother relationships are generally more intense than adolescent-father relationships and that mothers are generally more involved with their adolescents than fathers are (Lewis & Lamb, 2003). Our developmental findings on the conflict resolution styles of adolescents, described in Chapter 3, also suggest that adolescents try to negotiate the boundaries of parental authority with mothers rather than with fathers: Whereas adolescents increased in the use of positive problem solving with mothers, positive problem solving with fathers did not change on average. Moreover, whereas conflict engagement and withdrawal of adolescents with mothers increased from early adolescence on and decreased around mid-adolescence, conflict engagement of adolescents with fathers did not change and withdrawal increased from early to mid-adolescence. This increase in withdrawal of adolescents with both parents might be an indication of increasing autonomy of adolescents as it implies withdrawing from parental supervision. However, withdrawal with mothers started to decline around middle adolescence and was accompanied by a general increase of positive problem solving. These results all suggest that adolescents' relationships with mothers change at an earlier age than the relationship with fathers, probably because the relationship with mother is more intense than the relationship with father. As adolescents generally have more conflicts with mothers than with fathers (Laursen, 1995), they simply might have more opportunities with mothers to experiment with conflict resolution behavior and to develop more mature ways of communication.

### **6.2.3 Conflict: A Part of Adolescent Daily Life**

Many studies in the past have focused on and also found negative associates of conflict. For instance, high levels of conflict have been found to be related to higher levels of aggression, higher levels of delinquency, and lower school grades (for a review, see Smetana,

1996). Although we also found negative associations of conflict frequency with adolescent adjustment (Chapter 2) and relationship satisfaction (Chapter 5), in the current dissertation we showed that the way conflicts are handled is important in determining the effect on adolescent adjustment or relationship adjustment. We demonstrated in Chapter 2 that certain combinations of conflict resolution styles applied by both adolescents and parents were related to delinquency, independent of the level of conflict in general. With our diary study on the daily dynamics of conflict (Chapter 5), we demonstrated that the relation between conflict and relationship satisfaction on the same day was less negative when conflict was constructively handled than when it was unconstructively handled. Moreover, we demonstrated that conflict with parents on one day was not related to relationship satisfaction on the next, implying that a specific conflict with parents only causes temporary dips in adolescent perceived relationship satisfaction.

These findings suggest that the effect of a single conflict is modest, and that recurring conflict does not necessarily have detrimental outcomes. Conflict between adolescents and their parents occur on a daily basis, yet most adolescents do not develop problem behaviors. Also, most parent-adolescent relationships remain close (Holmbeck, 1996; Smetana, Campione-Barr, & Metzger, 2006). When conflict happens in positive relationships or when conflicts are handled constructively, they most likely have little negative consequences (see also Branje, Van Doorn, Van der Valk, & Meeus, 2008; Collins & Laursen, 1992; Collins & Steinberg, 2006). Even more striking is the finding that when relationship quality is high, an *increase* in conflict frequency from low to medium levels was sometimes even linked to better adjustment (Adams & Laursen, 2007), suggesting that in these relationships, conflict is just a way of expressing yourself and a tool for meeting the demands of a more horizontal relationship between parents and adolescents.

#### **6.2.4 General Questionnaires versus Diary Methods**

The current dissertation made use of two different kinds of methodology. In Chapter 2 to 4 we made use of general questionnaires and in Chapter 5 we made use of a diary approach. Both approaches have their own strengths and weaknesses. By means of a general questionnaire, participants were asked to recollect the frequency of conflicts during the past seven days. Then they were asked to indicate to what extent they displayed certain conflict resolution styles during these conflicts. It was important to note that a conflict or disagreement does not necessarily involve negative affect, as this might lead to an underestimation of the incidence of disagreements (Collins & Laursen, 1992). It was also

important to let participants recall conflicts that occurred in a relatively short period of time. Typically, recall periods vary from one day to one year. However, letting subjects remember conflicts during the past *year* would underestimate the real occurrence of conflict as probably only major, intense conflicts will be remembered for such a long period. Also, it is then more likely that measures of conflict actually represent underlying relationship representations (Feeney & Cassidy, 2003). Daily or weekly assessments of conflict have been found to be most valuable (Burk, Denissen, Van Doorn, Branje, & Laursen, 2008). Another advantage of the use of general questionnaires is that it is an efficient way of gathering data as it is less time-consuming than for instance observations or a diary study.

Larson and Almeida (1999) call for bridging the immediate and long-term time frames and plead for daily measurements or – as they call it – the missing middle time frame of hours and days. Observations can be regarded as the immediate time frame and general questionnaires with a relatively long interval in between (e.g., a year) as long-term time frames. Observations are valuable ways of investigating behavior, but they have also limitations as it is unknown as to whether behaviors in the controlled setting match the behaviors displayed in daily life. Also, the time frame of seconds and minutes limits the ability to investigate processes that unfold over hours and days such as conflict might do (Larson & Almeida, 1999). Diaries can provide valuable information in this case.

Probably the most well-known advantage of diary studies is the substantial decrease of biases which are common to retrospective recalls over relatively long periods (Bolger, Davis, & Rafaeli, 2003). Another advantage of using daily diary data is that within-person variability can be investigated (Papp, 2004). This is a huge advantage because in this way it controls for numerous extraneous, often unmeasured sources of variance linked to the person such as personality and response tendency (Larson & Almeida, 1999). Our diary study in Chapter 5 demonstrated that conflict, conflict resolution, and relationship satisfaction were related to each other on the same day for adolescents' relationships with fathers, mothers, and best friends, and were only related to each other one day later in adolescents' relationships with best friends. Such dynamics are hard to detect using general questionnaires regarding conflict within a time frame of for instance a week.

In Chapter 4, we demonstrated that the way parents handled conflicts with each other was related to the way adolescents handled conflicts with their parents two years later. Because we made use of long intervals between our measurements we were unable to ascertain more immediate mechanisms. Although it is less likely that adolescents permanently affect the way their parents handle conflicts with each other, adolescents might influence the

way their parents handle conflicts with each other more on the short-term. However, with the current design we were not able to investigate what processes sustain these longitudinal effects. Daily interactions might be the building blocks of how interactions lead to long-term effects. With our diary study we made a first attempt and provided insight in the daily dynamics of conflict and relationship satisfaction. We showed that relationship satisfaction fluctuates from day to day and thus that the stability of relationship satisfaction from one day to the next was low. Moreover, these fluctuations were explained by the occurrence of conflict and the way conflict was handled.

These findings might have important implications for future research. Dynamic systems theory regards variability in behavior as a necessary presumption for developmental change (Lewis, 2000). During transitional periods, previous behavior might not be appropriate anymore and new ways of interacting will develop. Before a new, stable interaction pattern will be established, a temporarily increase in variability is expected (Van Geert & Van Dijk, 2002). Indeed, adolescents were found to fluctuate more in their interactional behaviors during transitional periods (Granic, Hollenstein, Dishion, & Patterson, 2003). Therefore, it might be that daily conflict and perceived relationship satisfaction fluctuate even more during transitional periods. Hence, when we know when these transitional periods occur, it will be important for parents to serve as a role model during this transition as in these periods adolescents will be probably most sensitive for learning adequate conflict behavior.

Although the choice for one method or the other of course depends on the question to be answered, we would like to emphasize the potential of using a combination of general questionnaires and diary designs. In this way it will be possible to understand how short-term daily processes might lead to long-term effects in individual well-being and family functioning. Another recommendation is to limit the period wherein adolescents and parents had to recall conflicts as much as possible, as most conflicts between parents and adolescents concern everyday mundane issues such as household chores and school (Laursen, 1995; Smetana, 1989). Our finding that there was a relation between conflict with parents on one day and relationship satisfaction on the same day but that this relation disappeared one day later had remained undetected using a more traditional research method.

Results of this dissertation showed that adolescents and parents who generally used higher levels of conflict engagement also generally used higher levels of withdrawal. As has been mentioned before, the use of various conflict resolution styles by the same person is quite common (Rubenstein & Feldman, 1993). This finding might also be attributed to the method applied. Because adolescents and parents reported on the way they handled conflicts

during the last seven days and parents and adolescents typically have conflict with each other on a daily basis, it is possible that they predominantly used conflict engagement in some conflicts and withdrawal in others, as the general questionnaire contains aggregated scores of behaviors during various conflicts in the past week. Thus, the correlation between conflict engagement and withdrawal within parent-adolescent relationships might be explained by the fact that individuals can use various conflict resolution styles and might predominantly use one style in some conflicts and another style in others. The co-occurrence of conflict engagement and withdrawal within individuals might also be an indication of the existence of demand-withdraw patterns between parents and adolescents (both adolescent demand/parent withdraw and adolescent withdraw/parent demand). Several studies have shown the relevance of investigating the demand-withdraw pattern in parent-adolescent relationships (Caughlin & Malis, 2004a, 2004b; Caughlin & Ramey, 2005). Both parent-demand/adolescent-withdraw and adolescent-demand/parent withdraw has been found to occur during conflict situations and topic ownership has been found to play a profound role in who demands and who withdraws (Caughlin & Ramey, 2005). Typically, individuals are more likely to demand when they desire change and more likely to withdraw when the other person desire change. Thus, it is possible that the co-occurrence of conflict engagement and withdrawal within individuals reveals the existence of both types of demand-withdraw patterns. More specifically, it might reveal the existence of the adolescent demand/parent withdraw pattern on topics on which adolescents desire change and the parent demand/adolescent withdraw pattern on topics on which parents desire change. These processes can not be detected by using general questionnaires, but can be detected when using diaries, as adolescents – and preferably also parents – can report on who initiated the conflict or desired a change and report on the use of demand (i.e., conflict engagement) and withdrawal.

### **6.3 Strengths and Limitations**

A major strength of the current dissertation is the use of independent reports. Although in Chapter 2 the relation between *adolescents'* self-reported conflict resolution styles and *adolescents'* self-reported delinquency could be explained by shared method variance, the fact that this relation was moderated by parents' self-reported conflict resolution styles makes this rather unlikely. In Chapter 3, we demonstrated two longitudinal pathways of conflict resolution by using self-reports of parents and adolescents. These pathways showed that higher levels of a certain conflict resolution style reported by adolescents were accompanied

by higher levels of the same conflict resolution style reported by parents. Moreover, in our study on the transmission of conflict resolution styles from marital relationships to adolescent-parent relationships (Chapter 4), we found transmission effects from reports from both parents in one subsystem (marital subsystem) to reports from adolescents with both parents in another subsystem (adolescent-parent subsystem). This makes our findings very robust. Unfortunately, our diary study consisted of self-reports of adolescents only. Because diaries are a time-consuming way of research, we only let adolescents fill them out. However, in the future it would be very interesting to ask parents to fill out the diary at the same time and combine these two reports for more independent relations. Moreover, as conflict has been found to have different meanings for adolescents and parents and as they are also differently affected by conflict (see Steinberg, 2001), diaries filled out by parents and adolescents at the same time can provide valuable details on these discordant views.

In this dissertation our main goal was to understand *conflict resolution* in adolescent relationships with parents and friends. Of course, other variables – that we did not incorporate in these studies – might have influenced our findings as well. These variables range from characteristics of adolescents themselves to characteristics of the parents to the social context in which adolescents operate. For instance, conflict might have a different meaning for adolescents, depending on attachment dimensions or personality. Research on romantic relationships showed that highly anxious individuals reported lower relationship satisfaction than less anxious individuals on days they perceived conflict (Campbell, Simpson, Boldry, & Kashy, 2005). In a similar vein, conflict and conflict resolution might be less related to problem behaviors and relationship quality for adolescents with a resilient personality type than for adolescents with an overcontroller or undercontroller personality type. Characteristics of *parents* that have an influence on our findings might include personality aspects as well but also phenomena such as midlife crisis. When children enter adolescence, parents typically reach the age of midlife, which provides challenges of their own for these individuals besides from being a parent of an adolescent (Silverberg & Steinberg, 1987; Steinberg & Silverberg, 1987). This might impact the way they interact with their adolescents during conflict situations. We were also not able to incorporate information regarding birth-order in our studies. Recently, research showed that the peak in conflict frequency is sooner with second-born children than with first-born children (Shanahan, McHale, Osgood, & Crouter, 2007). This might also have consequences for the way parents deal with conflicts with their second-born. Although adolescents go through their own developmental changes, our studies showed that parents play an important role in adolescents' development and thus this might have an

impact on for instance the realignment of these relationships. Finally, with regard to our study on the relation between conflict resolution and delinquency (Chapter 2), we should acknowledge the important role peers play when investigating delinquency (Dishion, Andrews, & Crosby, 1995).

Generalization of our findings is a potential limitation of the current dissertation. The samples we used in our studies consisted of Dutch adolescents who lived with both parents. Generally, the families that participated were highly educated and well-functioning. However, despite the fact that only white, two-parent families participated and that for instance delinquency levels were rather low, we still found variation in our measures and we were also able to explain variability in delinquency (Chapter 2). Moreover, although the two types of parent-adolescent dyads we found, based on their levels of conflict resolution styles, reported relatively high levels of positive problem solving, they meaningfully differed in their use of conflict engagement and withdrawal (Chapter 3). Thus, even within this rather homogeneous group, we were able to find meaningful differences. Still, some processes we found might be more apparent for some groups of parent-adolescent dyads than for others. It would be interesting for future research to detect precursors of a group of adolescents that might be at risk for developing problem behaviors or to detect precursors of disturbed family relations. Perhaps there are parent-adolescent dyads in our sample that score extremely high on conflict engagement. These dyads could be filtered out and their longitudinal pathways could be examined. Dynamics might also be different for different groups. For instance, transmission effects of conflict resolution styles from marital relationships to adolescent-parent relationships might be moderated by the level of conflict, both marital conflict and parent-adolescent conflict. Perhaps transmission predominantly occurs in family systems in which conflicts occur *regularly* as opposed to *very often* or *never*. Daily dynamics of conflict might also be different for different groups of adolescents. A combination of longitudinal research and diaries can provide insights in the dynamics of a specific group of adolescents or parent-adolescent dyads and whether the mechanisms that lie behind general findings might be different for these groups.

Another issue that needs to be addressed is the direction of effects of our findings. In Chapter 2, we used cross-sectional data to investigate the relation between conflict resolution in parent-adolescent relationships and adolescent delinquency. Although we suggested that dysfunctional combinations of conflict resolution styles by adolescents and parents have an effect on delinquent behaviors of the adolescent, it is also likely that adolescents who display delinquent behaviors are not very effective in handling conflicts with their parents. In Chapter

3, we showed that different groups of parent-adolescent dyads could be distinguished longitudinally based on their conflict resolution styles. Whereas they significantly differed in their mean levels of conflict resolution styles, the patterns we detected were rather stable. With the applied design, we were not able to disentangle direction of effects between conflict resolution styles of parents and adolescents. Had we used a cross-lagged design with measurement points that were less far apart, we would have been able to determine whether the way adolescents resolved conflict with their parents was related to the way parents resolved conflicts with adolescents over time or vice versa. Given the current findings, it is likely that we would have found bidirectional effects when we examined these relations on the short run as both parents and adolescents are thought to actively participate in the mutual and reciprocal process of redefining their relationship and as our current results suggest that parents and adolescents mutually influence each others' behavior. In our study regarding transmission of conflict resolution styles from marital relationships to adolescent-parent relationships (Chapter 4), we were able to investigate relations over time within a time interval of two years. We showed that conflict resolution styles in marital relationship were related to conflict resolution styles in adolescent-parent relationships two years later. This is probably as close as we can get using traditional research when investigating direction of effects between variables, but even with the current design we can not exclude third variables that might explain our findings. For instance, it is possible that genetic resemblance in conflict resolution styles of parents and adolescent becomes apparent during adolescence. However, as we have mentioned before (§ 6.2.4), with this design we were not able to examine whether more short-term effects in transmission of conflict resolution styles occurred from adolescents to the marital relationship. Finally, in Chapter 5, we investigated daily dynamics of conflict and relationship satisfaction. With regard to the relation of conflict on relationship satisfaction one day later, we might consider this as a prediction over time as multiple measurements were provided and as we controlled for relationship satisfaction on the day before. In addition, although reduced relational satisfaction can lead to conflict on the same day, tomorrow's satisfaction can't cause today's conflict (Seidman, Green, Rafaeli, Shrout, & Bolger, 2004). Thus, in the current dissertation, the direction of effects has been an issue that has been addressed in some studies better than in others. In social sciences, however, implying direction of effects will always be a problem. Obviously, multiple measurements are necessary when predicting relations over time and we would also like to stress the potential of diary studies again.

## 6.4 Suggestions for Future Research

The aim of the current dissertation was to provide more information on conflict and conflict resolution in adolescent relationships. Our four empirical studies elaborated on previous studies and all addressed a specific aspect of conflict and conflict resolution in adolescent relationships. However, unanswered questions remain. There are some issues that might be particularly interesting for future research. For instance, how do the conflict resolution styles reported by adolescents and parents on the general questionnaires match the conflict resolution styles they report for specific conflict interactions? We showed that certain combinations of styles by adolescents and parents were found to be detrimental. Moreover, we showed that two longitudinal types of adolescent-parent dyads could be distinguished based on their configuration of conflict resolution styles and that these types were found to be rather stable. This suggests that the occurrence of interaction patterns between adolescents and parents are hard to change. Although the positive group showed some realignment, these pathways were more characterized by stability than by change. Conflict resolution in the two types of parent-adolescent dyads thus seems quite stable over time, but is this stability also apparent in the *specific interactions* adolescents have with their parents. In other words, does an adolescent and his or her mother/father interact in the same way during various specific conflicts or is there variation in the way they handle specific conflicts? And, subsequently, what can account for this variation? We already mentioned that the choice for a conflict resolution style might depend on topic ownership, but it might depend on other factors as well. When considering specific, daily conflicts, it might also be important to examine the influence of mood or stress on the occurrence of conflict and on the way conflict is handled. Daily stressors in adolescents' and their parents' lives such as stress at school (e.g., getting a low grade) or work, or problems in a romantic relationship or in the marital relationship might spill over to the home setting, thereby influencing adolescent and parental behavior. Systematic in-depth research on daily conflicts in adolescent relationships might provide more information.

Another question that remains to be answered is: How do distressed families differ from our relatively well-functioning sample of families? Research has already shown that distressed families report higher levels of conflict and that in these families more aggressive conflict resolution styles are used. It would be interesting to find out whether adolescents and parents from distressed families have certain ways of interacting with each other during specific conflicts. Perhaps they are trapped in rigid, dysfunctional ways of resolving conflicts

with each other. These families probably show no realignment toward a more horizontal relationship at all. In addition, the daily dynamics might be different for distressed families. Perhaps the conflicts they have do linger on and have a more long-lasting negative impact on relationship satisfaction compared to the conflicts that occur in “normal” families. On the contrary, it might also be that the conflicts that occur in distressed families have no impact on the relationship at all. Maybe these adolescents and parents are so used to arguing and fighting that they habituate to the impact of conflicts over time. These questions are beyond the scope of the present dissertation, but they might provide useful leads for future research.

Finally, we would like to question the common finding and subsequent interpretation that conflicts occur over mundane, trivial issues. Although it might seem trivial discussing whether an adolescent should or should not clean his or her room, this might have a deeper meaning. As Emery (1992) suggested, conflicts carry at least two levels of meaning: a surface meaning and a deep meaning. A surface meaning refers to the literal content of the conflict, in our example this would be cleaning one’s room. A deep meaning of a conflict is a metacommunication about what its content and process of resolution conveys about the broader structure of the relationship. The deep meaning of a conflict about cleaning one’s room might be autonomy and thus might reveal the developmental change in boundaries between an adolescents’ autonomy and a parent’s authority. Thus, beyond the way adolescents handle conflicts with their relationship partners, the topic of a conflict might also reveal information about these relationships. Finally, issues on seemingly trivial issues might serve as proxies for conflicts on more serious issues (Arnett, 1999). For instance, by attempting to restrict where adolescents can go and how late they should stay out, parents might be indirectly trying to limit adolescents’ access to alcohol or drugs. Thus, future research should be more nuanced when interpreting the meaning of disagreements. Although the disagreements adolescents and parents have may seem trivial, they convey important information about the relationship in general and about communication in these relationships specifically. Moreover, the disagreements adolescents and parents have might also have consequences for future communication in these relationships.

#### **6.4 Concluding Remarks**

Managing conflict appropriately is an essential aspect of maintaining functionally significant relationships over time. In the current dissertation, we demonstrated the importance of conflict resolution by parents. First, we demonstrated the need for examining

the interplay between parents' and adolescents' conflict behaviors. With regard to adolescent development, we demonstrated that parent-adolescent relationships generally realign towards greater egalitarianism as indicated by way they handle conflicts with each other. In addition, when investigating conflict resolution in parent-adolescent relationships, it appeared useful to include conflict resolution in the marital subsystem as well. This dissertation showed the importance of using independent reports, thereby strengthening our findings. Finally, by using both general questionnaires and a diary method, we derived better insights in longitudinal processes as well as in daily dynamics of conflict resolution in relationships. Future research would profit most from a combination of both methods, as this will make it possible to detect the immediate mechanisms that sustain our longitudinal findings.

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## Summary

Conflict is an inevitable feature of social relationships. Especially in close relationships, people sometimes disagree. Although conflict might jeopardize relationships, conflict is not necessarily detrimental. The way conflicts are handled is important in determining whether conflicts are functional or dysfunctional. Moreover, the way conflicts are handled might reveal information about the nature of relationships and their developmental status. In the current dissertation, the role of conflict resolution in adolescents' relationships with their parents and friends was investigated in four empirical studies. The main focus was on parent-adolescent conflict, but in Chapter 5 conflict with friends was also examined.

Participants of the first three studies were 323 adolescents and their parents, called the family sample. This sample was a subsample of a larger research sample, CONAMORE, that consisted of 938 early adolescents and 393 middle adolescent from twelve high schools located in the province of Utrecht, The Netherlands. At the first measurement of the main study, the Dutch early adolescents received a letter including an invitation to participate with both parents during annual home visits as well. Adolescents of the family sample annually filled out a battery of questionnaires at school and also filled out additional questionnaires during the annual home visits. During these annual home visits, both parents also filled out questionnaires. Participants of the fourth study, the diary study, were 72 middle adolescents who were a subsample of the early adolescents of the main study. These 72 adolescents did not participate in the family sample. Characteristics such as ethnicity, family structure, and educational level were matched with adolescents that participated in the family sample in order to be able to compare the results of the current dissertation.

Chapter 2 concerned a cross-sectional study on the relation between conflict resolution of adolescents and parents and adolescent delinquency. More specifically, we examined how the conflict resolution styles *adolescents* use, the conflict resolution styles *parents* use, and *combinations* of adolescents' and parents' conflict resolution styles were related to adolescent delinquency. The results of this study showed that conflict engagement of adolescents with both fathers and mothers was related to higher levels of delinquency, although this effect was moderated by a conflict resolution style of the parent. In adolescent-father relationships, the demand-withdraw pattern in which adolescents used higher levels of conflict engagement (i.e., demand) and fathers withdraw was related to higher levels of adolescent delinquency. In adolescent-mother relationships, a pattern in which both adolescents and mothers used higher levels of conflict engagement (i.e., a mutually hostile interaction pattern) was found to be

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related to higher levels of delinquency. With this study we demonstrated the importance of investigating combinations of conflict resolution of both adolescents and their parents.

In the longitudinal study described in Chapter 3, we examined the development of conflict resolution styles of adolescents and their parents. Moreover, we investigated whether different groups of parent-adolescent dyads could be distinguished longitudinally based on the extent to which they used the conflict resolution styles conflict engagement, positive problem solving, and withdrawal. We showed that positive problem solving of adolescents with mothers increased from early to middle adolescence and that conflict engagement and withdrawal with mothers first increased but then declined around mid-adolescence. Adolescents' conflict resolution with fathers did not change on average, except for an increase of withdrawal. Both parents were found to decrease their use of conflict engagement and fathers increased their use of positive problem solving over time. In general, both parents and adolescents developed in their use of conflict resolution styles from early to middle adolescence, thereby meeting the relationship demands of a more horizontal relationship. In addition, we found two types of parent-adolescent dyads, with one reporting higher levels of conflict engagement and withdrawal than the other. These either positive or negative pathways of conflict resolution in parent-adolescent relationships were maintained by both parents and adolescents, indicating ongoing reciprocal processes in parent-adolescent relationships from early to middle adolescence.

Chapter 4 focused on longitudinal transmission of conflict resolution from marital relationships to adolescent-parent relationships. We were able to investigate whether the way parents resolve conflicts with each other influenced the way adolescents resolve conflicts with their parents, whether the way adolescents resolve conflicts with their parents influenced the way parents resolve conflicts with each other or whether conflict resolution in both subsystems influenced each other. We demonstrated that the way parents handled conflicts with each other was related to the way adolescents handled conflicts with their parents two years later with regard to conflict engagement and positive problem solving. We found no transmission effect of withdrawal from marital relationships to adolescent-parent relationships. With the current study we were able to disentangle direction of effects and showed that conflict resolution in the more stable marital relationship had an effect on conflict resolution in the less stable adolescent-parent relationship.

The diary study described in Chapter 5 examined the daily dynamics of conflict and relationship satisfaction. The results showed that adolescents reported lower relationship satisfaction with fathers, mothers, and best friends on days on which conflict occurred with

the specific relationship partner than on days on which no conflict occurred. More specifically, perceived relationship satisfaction was lowest on days when unconstructively handled conflict occurred, second lowest on days when constructive conflict occurred and highest on days when no conflict occurred. We also investigated whether this relation was still present one day later. Results indicated that conflicts with parents did not linger on: We found no relation between conflict on one day and perceived relationship satisfaction one day later. With friends, we did find a relation between conflict on one day and perceived relationship satisfaction one day later: Conflict, and especially unconstructively handled conflict, was found to be related to higher perceived relationship satisfaction one day later. This finding highlighted the vulnerability of friendships and the need for reparation of the relationship after a conflict occurred in order to maintain the friendship.

Taken together, there are two main conclusions that can be drawn from the studies presented in the current dissertation. First, we demonstrated the important role conflict resolution of parents plays in adolescent functioning: The way parents handled conflicts with each other was related to the way adolescents handled conflict with their parents, the way parents handled conflict with adolescents was continuously related to the way adolescents handled conflict with their parents, and the way parents resolved conflicts with adolescents was found to moderate the relation between adolescent conflict resolution and adolescent delinquency. Furthermore, the dissertation shows the importance of using diary methods as a potential and promising way when examining daily dynamics of adolescent lives.



## Samenvatting (Summary in Dutch)

Conflicten zijn vaak onvermijdelijk in sociale relaties. Vooral in hechte relaties zijn mensen het soms met elkaar oneens. Hoewel conflicten een bedreiging kunnen zijn voor de relatie, zijn ze dat niet per definitie. Of conflicten positief of negatief zijn, hangt voor een belangrijk deel af van de manier waarop met conflicten om wordt gegaan. Bovendien geeft de manier waarop met conflicten omgegaan wordt ons informatie over de aard en ontwikkelingsstatus van de relatie. In dit proefschrift werd de rol van conflictoplossing in de relatie van adolescenten met ouders en vrienden onderzocht door middel van vier empirische studies. We hebben voornamelijk conflicten tussen adolescenten en ouders onderzocht, maar in Hoofdstuk 5 hebben we ook conflicten met vrienden onderzocht.

De deelnemers aan de eerste drie studies van dit proefschrift waren 323 adolescenten en hun ouders. Zij kwamen uit de zogenaamde gezinssteekproef, wat een substeekproef is van een groter onderzoeksproject genaamd CONAMORE. De hoofdstudie bestond uit een steekproef van 938 vroege adolescenten en 393 midden adolescenten van 12 middelbare scholen in de omgeving van Utrecht. Op het eerste meetmoment van de hoofdstudie werden de Nederlandse vroege adolescenten uitgenodigd om met hun beide ouders ook mee te doen tijdens jaarlijkse huisbezoeken. De adolescenten uit de gezinssteekproef vulden zowel jaarlijks vragenlijsten in op school als tijdens de huisbezoeken. Tijdens deze huisbezoeken vulden de beide ouders ook vragenlijsten in. Deelnemers aan de vierde studie, de dagboekstudie, waren 72 midden adolescenten. Zij waren ook een substeekproef van de vroege adolescenten uit de hoofdstudie, maar namen niet deel aan de gezinssteekproef. Om ervoor te zorgen dat de resultaten van de studies in dit proefschrift vergelijkbaar zijn, werden de adolescenten die aan de dagboekstudie meededen gematched met de deelnemers van de gezinssteekproef op zaken als etniciteit, woonsituatie en opleidingsniveau.

Hoofdstuk 2 betrof een cross-sectionele studie naar de relatie tussen conflictoplossing van adolescenten en ouders enerzijds en delinquent gedrag van adolescenten anderzijds. We onderzochten hoe conflictoplossingstijlen van *adolescenten* met ouders, conflictoplossingstijlen van *ouders* met adolescenten en *combinaties* van conflictoplossingstijlen van adolescenten en ouders gerelateerd waren aan delinquentie. Conflict aangaan van adolescenten met zowel vaders als moeders bleek gerelateerd te zijn aan meer delinquent gedrag bij adolescenten, maar dit effect werd gemodereerd door een conflictoplossingstijl van de ouder. In de relatie met vader bleek het *demand-withdraw* patroon (een interactiepatroon waarbij één persoon het conflict aangaat en de ander zich

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terugtrekt) waarin adolescenten het conflict meer aanging en vaders zich meer terugtrokken gerelateerd aan meer delinquent gedrag. In de relatie met moeder bleek het patroon waarbij zowel de adolescent als de moeder het conflict meer aanging (een wederzijds hostiel interactiepatroon) gerelateerd aan meer delinquent gedrag. Met deze studie lieten we zien dat het belangrijk is om combinaties van conflictoplossingstijlen van adolescenten en ouders te onderzoeken.

In de longitudinale studie die in Hoofdstuk 3 is beschreven, onderzochten we de ontwikkeling van conflictoplossingstijlen van adolescenten en hun ouders. Bovendien onderzochten we of er verschillende groepen longitudinaal te onderscheiden waren op basis van de mate waarin zij de conflictoplossingstijlen conflict aangaan, positief probleem oplossen en terugtrekken gebruikten. We lieten zien dat positief probleem oplossen van adolescenten met moeders toenam van de vroege naar midden adolescentie en dat conflict aangaan en terugtrekken met moeders eerst toenam maar rond de midden adolescentie weer daalde. De manier waarop adolescenten conflicten met vaders oplosten, veranderde gemiddeld genomen niet, behalve dat we een toename van terugtrekken van adolescenten met vaders vonden. We vonden dat zowel vaders als moeder over tijd minder conflict aangaan gebruikten en dat vaders over tijd meer positief probleem oplossen gebruikten. In het algemeen vonden we dat zowel adolescenten als ouders zich ontwikkelden in de manier waarop ze tijdens conflicten met elkaar omgingen, overeenkomend met de veranderende eisen die een meer gelijkwaardigere relatie aan adolescenten en hun ouders stelt. Behalve de ontwikkeling van conflictoplossingstijlen in het algemeen, vonden we ook twee longitudinale typen voor de relatie met zowel vaders als moeders waarbij één type meer conflict aangaan en terugtrekken gebruikte tijdens conflicten dan de ander. Deze positieve en negatieve trajecten van conflictoplossing werden in stand gehouden door zowel adolescenten als hun ouders.

Hoofdstuk 4 richtte zich op de longitudinale overdracht van conflictoplossingstijlen van de huwelijksrelatie naar de adolescent-ouderrelatie. Met deze studie hebben we onderzocht of de manier waarop ouders onderling conflicten oplosten van invloed was op de manier waarop adolescenten conflicten met hun ouders oplosten, of de manier waarop adolescenten conflicten met hun ouders oplosten van invloed was op de manier waarop ouders onderling conflicten oplosten of dat conflictoplossingstijlen in beide subsystemen elkaar beïnvloedden. We vonden dat de manier waarop ouders onderling conflicten oplosten gerelateerd was aan de manier waarop adolescenten twee jaar later conflicten met hun ouders oplosten met betrekking tot conflict aangaan en positief probleem oplossen. We vonden geen overdracht van de conflictoplossingstijl terugtrekken. Met deze studie waren we in staat om te

onderzoeken of er daadwerkelijk overdracht plaatsvond en we vonden dat conflictoplossing in de meer stabiele huwelijksrelatie een effect had op de conflictoplossing in de minder stabiele adolescent-ouderrelatie.

In de dagboekstudie die in Hoofdstuk 5 werd beschreven, onderzochten we de dagelijkse dynamiek van conflicten en relatietevredenheid. Adolescenten bleken minder tevreden te zijn met de relatie met vaders, moeders, en beste vrienden op dagen waarop er een conflict had plaatsgevonden in de betreffende relatie dan op dagen waarop er geen conflict had plaatsgevonden. Bovendien bleek relatietevredenheid het laagst wanneer er een niet-constructief conflict had plaatsgevonden, bleek relatietevredenheid één-na-laagst wanneer er een constructief conflict had plaatsgevonden en het hoogst wanneer er geen conflict was geweest. We hebben ook onderzocht of er een relatie was tussen conflict op de ene dag en relatietevredenheid een dag later. Conflicten met ouders bleken alleen voor een tijdelijke dip in relatietevredenheid te zorgen, aangezien conflict op de ene dag niet meer gerelateerd was aan relatietevredenheid een dag later. In relatie met vrienden vonden we echter dat er wel een verband was tussen conflict op de ene dag en relatietevredenheid een dag later: conflict, en vooral niet-constructief conflict, bleek gerelateerd aan een hogere tevredenheid met de relatie een dag later. Deze bevinding weerspiegelt de kwetsbaarheid van vriendschappen en suggereert dat het met vrienden nodig is om het goed te maken nadat er een conflict is geweest om de relatie te laten voortbestaan.

Samenvattend zijn er twee conclusies die we kunnen trekken op basis van de studies in dit proefschrift. Ten eerste bleek conflictoplossing van ouders een belangrijke rol te spelen in het functioneren van adolescenten: de manier waarop ouders onderling conflicten oplosten was gerelateerd aan de manier waarop adolescenten conflicten met hun ouders oplosten, de manier waarop ouders conflicten met adolescenten oplosten was continu gerelateerd aan de manier waarop adolescenten conflicten met hun ouders oplosten en de manier waarop ouders conflicten met adolescenten oplosten bleek de relatie tussen conflictoplossing van de adolescent met ouders en delinquentie te modereren. Tot slot laat dit proefschrift de toegevoegde waarde van het gebruik van een dagboekmethode zien, waarbij het mogelijk is om de dagelijkse dynamiek van het leven van adolescenten te bestuderen.



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## Curriculum Vitae

Muriel van Doorn was born on March 24<sup>th</sup> 1980 in Hoogeveen, the Netherlands. After completing pre-university education at the Eckart College in Eindhoven in 1998, she attended Maastricht University from 1998 to 2003 and earned a master's degree in Psychology. In 2004, she started her PhD project at the Research Centre Adolescent Development of Utrecht University, as part of the multidisciplinary research program *Changing Patterns of Interdependence and Solidarity in Family Relations*. From 2004 to 2008 she worked on her dissertation about conflict resolution in adolescent relationships and presented her work at several national and international conferences. During this period, Muriel also gained teaching experience by teaching in an undergraduate course, supervising bachelor and master theses, and giving guest lectures in an international research master program. In addition, she was PhD student representative of the Langeveld Institute for two years. In May 2006, Muriel was selected to attend the third summer school of the European Association of Research on Adolescence. In October 2006, she visited Patrick E. Shrout at New York University and Niall Bolger at Columbia University, where she attended research meetings and presented her work. Since November 2008, Muriel works as a postdoctoral researcher at the Research Centre Adolescent Development of Utrecht University.

## Publications

### *This dissertation*

- Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (2008). Reciprocity of conflict resolution styles in parent-adolescent relationships: A four-wave longitudinal study. *Manuscript resubmitted for publication.*
- Van Doorn, M. D., Branje, S. J. T., Hox, J. J., & Meeus, W. H. J. (in press). Intraindividual variability in adolescents' perceived relationship satisfaction: The role of daily conflict. *Journal of Youth and Adolescence.*
- Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (in press). Conflict Resolution in Parent-Adolescent Relationships and Adolescent Delinquency. *The Journal of Early Adolescence.*
- Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (2007). Longitudinal transmission of conflict resolution styles from marital relationships to parent-adolescent relationships. *Journal of Family Psychology, 21*, 426-434.

### *Other publications*

- Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (2008). Conflictoplossing tussen ouders en adolescenten en delinquentie. [Conflict resolution in parent-adolescent relationships and delinquency]. *Manuscript resubmitted for publication.*
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